Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssptajem1625

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JAN 02	STN pricing information for 2008 now available
NEWS 3	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 4	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 5	JAN 28	MARPAT searching enhanced
NEWS 6	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS 7	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9	FEB 08	STN Express, Version 8.3, now available
NEWS 10	FEB 20	PCI now available as a replacement to DPCI
NEWS 11	FEB 25	IFIREF reloaded with enhancements
NEWS 12	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS 13	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification
NEWS 14	MAR 31	IFICDB, IFIPAT, and IFIUDB enhanced with new custom IPC display formats
NEWS 15	MAR 31	CAS REGISTRY enhanced with additional experimental spectra
NEWS 16	MAR 31	CA/CAplus and CASREACT patent number format for U.S. applications updated
NEWS 17	MAR 31	LPCI now available as a replacement to LDPCI
NEWS 18	MAR 31	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19	APR 04	STN AnaVist, Version 1, to be discontinued
NEWS 20	APR 15	WPIDS, WPINDEX, and WPIX enhanced with new predefined hit display formats
NEWS 21	APR 28	EMBASE Controlled Term thesaurus enhanced
NEWS 22	APR 28	IMSRESEARCH reloaded with enhancements
NEWS 23	MAY 30	INPAFAMDB now available on STN for patent family searching
NEWS 24	MAY 30	DGENE, PCTGEN, and USGENE enhanced with new homology sequence search option
NEWS 25	JUN 06	EPFULL enhanced with 260,000 English abstracts
NEWS 26	JUN 06	KOREAPAT updated with 41,000 documents
NEWS 27	JUN 13	USPATFULL and USPAT2 updated with 11-character patent numbers for U.S. applications
NEWS 28	JUN 19	CAS REGISTRY includes selected substances from web-based collections
NEWS 29	JUN 25	CA/CAplus and USPAT databases updated with IPC

reclassification data
NEWS 30 JUN 30 AEROSPACE enhanced with more than 1 million U.S. patent records
NEWS 31 JUN 30 EMBASE, EMBAL, and LEMBASE updated with additional options to display authors and affiliated organizations
NEWS 32 JUN 30 STN on the Web enhanced with new STN AnaVist Assistant and BLAST plug-in
NEWS 33 JUN 30 STN AnaVist enhanced with database content from EPFULL

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 09:40:40 ON 15 JUL 2008

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 09:40:53 ON 15 JUL 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 JUL 2008 HIGHEST RN 1034013-75-6
DICTIONARY FILE UPDATES: 14 JUL 2008 HIGHEST RN 1034013-75-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

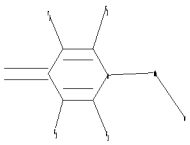
TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

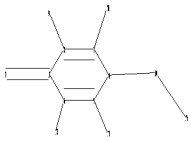
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10-589,051-1.str





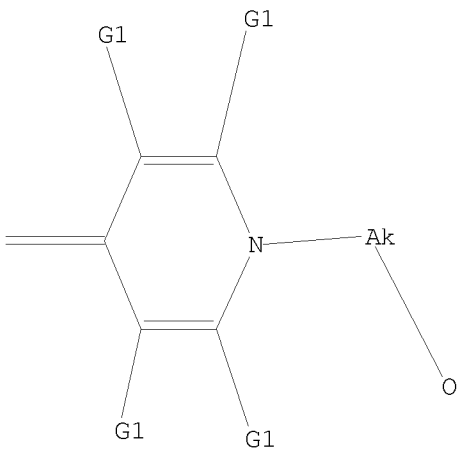
chain nodes :
7 9 10 12 13 14 15
ring nodes :
1 2 3 4 5 6
chain bonds :
1-7 2-9 3-10 4-14 5-13 6-12 14-15
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 2-9 3-4 3-10 4-5 4-14 5-6 5-13 6-12 14-15
exact bonds :
1-7

G1:Cb,Ak,H

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:CLASS 10:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 Cb,Ak,H

Structure attributes must be viewed using STN Express query preparation.

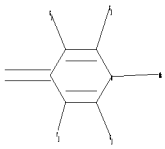
=> s l1 sss sam
SAMPLE SEARCH INITIATED 09:41:19 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 21961 TO ITERATE

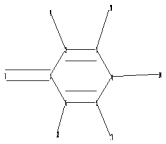
9.1% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 430349 TO 448091
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=>
Uploading C:\Program Files\Stnexp\Queries\10-589,051-1a.str





chain nodes :
7 9 10 12 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
1-7 2-9 3-10 4-14 5-13 6-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 2-9 3-4 3-10 4-5 4-14 5-6 5-13 6-12
exact bonds :
1-7

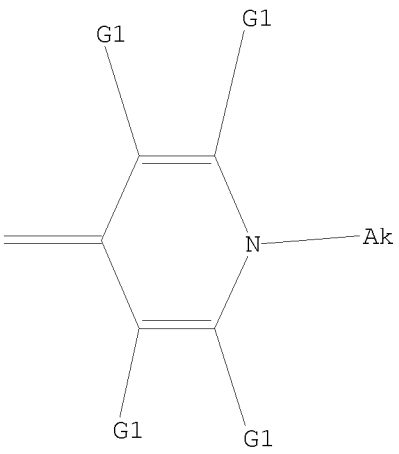
G1:Cb,Ak,H

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:CLASS 10:CLASS
12:CLASS 13:CLASS 14:CLASS

L3 STRUCTURE UPLOADED

=> d l3

L3 HAS NO ANSWERS
L3 STR



G1 Cb,Ak,H

Structure attributes must be viewed using STN Express query preparation.

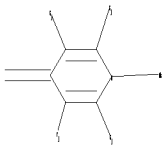
=> s l3 sss sam
SAMPLE SEARCH INITIATED 09:42:19 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 21961 TO ITERATE

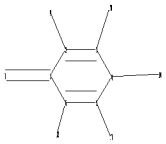
9.1% PROCESSED 2000 ITERATIONS 7 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 430349 TO 448091
PROJECTED ANSWERS: 1011 TO 2063

L4 7 SEA SSS SAM L3

=>
Uploading C:\Program Files\Stnexp\Queries\10-589,051-1b.str





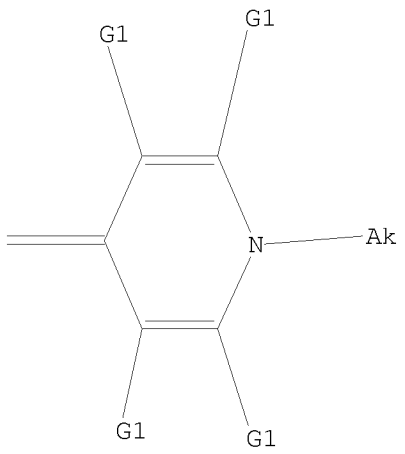
chain nodes :
7 9 10 12 13 14
ring nodes :
1 2 3 4 5 6
chain bonds :
1-7 2-9 3-10 4-14 5-13 6-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 2-9 3-4 3-10 4-5 4-14 5-6 5-13 6-12
exact bonds :
1-7
isolated ring systems :
containing 1 :

G1:Cb,Ak,H

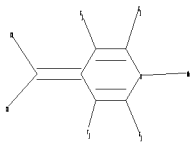
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:CLASS 10:CLASS
12:CLASS 13:CLASS 14:CLASS

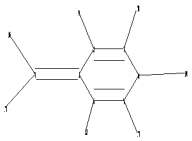
L5 STRUCTURE UPLOADED

```
=> d l5
L5 HAS NO ANSWERS
L5              STR
```




```
G1 Cb,Ak,H


Structure attributes must be viewed using STN Express query preparation.


=> s l5 sss sam
SAMPLE SEARCH INITIATED 09:43:25 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    21961 TO ITERATE

  9.1% PROCESSED     2000 ITERATIONS                                 7 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       430349 TO   448091
PROJECTED ANSWERS:            1011 TO     2063

L6             7 SEA SSS SAM L5

=>
Uploading C:\Program Files\Stnexp\Queries\10-589,051-1c.str
```





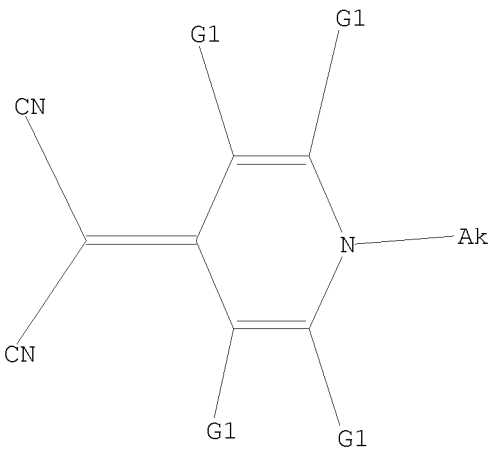
chain nodes :
7 9 10 12 13 14 16 17
ring nodes :
1 2 3 4 5 6
chain bonds :
1-7 2-9 3-10 4-14 5-13 6-12 7-16 7-17
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 2-9 3-4 3-10 4-5 4-14 5-6 5-13 6-12
exact bonds :
1-7 7-16 7-17
isolated ring systems :
containing 1 :

G1:Cb,Ak,H

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:CLASS 10:CLASS
12:CLASS 13:CLASS 14:CLASS 16:CLASS 17:CLASS

L7 STRUCTURE UPLOADED

```
=> d l7
L7 HAS NO ANSWERS
L7              STR
```




```
G1 Cb,Ak,H


Structure attributes must be viewed using STN Express query preparation.


=> s l7 sss sam
SAMPLE SEARCH INITIATED 09:45:33 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      213 TO ITERATE

100.0% PROCESSED      213 ITERATIONS                                9 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         3385 TO     5135
PROJECTED ANSWERS:               9 TO      360

L8            9 SEA SSS SAM L7

=> s l7 sss full
FULL SEARCH INITIATED 09:45:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     4769 TO ITERATE

100.0% PROCESSED     4769 ITERATIONS                             149 ANSWERS
SEARCH TIME: 00.00.01

L9          149 SEA SSS FUL L7

=>
=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     197.22     197.43
```

FILE 'CAPLUS' ENTERED AT 10:06:05 ON 15 JUL 2008

FILE COVERS 1907 - 15 Jul 2008 VOL 149 ISS 3
FILE LAST UPDATED: 14 Jul 2008 (20080714/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/legal/infopolicy.html

=> s l9
L10 32 L9

=> d ibib abs hitstr 1-
YOU HAVE REQUESTED DATA FROM 32 ANSWERS - CONTINUE? Y/(N):y

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:171924 CAPLUS
DOCUMENT NUMBER: 146:258239
TITLE: Use of ionic 1,4-dihydropyridine UV-A sunscreens
INVENTOR(S): Berg-Schultz, Katja; Mendrok-Edinger, Christine; Poschalko, Alexander; Westenfelder, Horst
PATENT ASSIGNEE(S): DSM IP Assets B.V., Neth.
SOURCE: PCT Int. Appl., 92pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007017179	A1	20070215	WO 2006-EP7691	20060803

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2005-17041 A 20050805

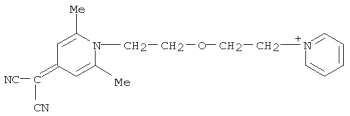
OTHER SOURCE(S): MARPAT 146:258239

AB The present invention relates to advantageous uses of 1,4-dihydropyridine derivs. and to novel cosmetic or dermatol. sunscreen compns. containing 1,4-dihydropyridine derivs. Thus, 4-dicyanomethylene-2,6-dimethyl-1,4-dihydropyridine-N-(ethyloxyethyloxyphosphate ester monosodium salt) was prepared and formulated at 2% together with 4% Parsol MCX into an oil/water sunscreen lotion which absorbs in the UV-A and UV-B range.

IT 863406-54-6P 863406-56-8P 863406-58-0P 863406-60-4P 863406-63-7P 863406-64-8P 863406-65-9P 863406-66-0P 863406-67-1P 863406-68-2P 863406-69-3P 863406-70-6P 863406-72-8P 863406-73-9P 863406-78-4P 863406-79-5P 863406-80-8P 863406-81-9P 863407-00-5P 863407-01-6P 863407-03-8P 924726-36-3P 924726-37-4P 924726-38-5P 924726-39-6P 924726-40-9P 924726-42-1P
RL: COS (Cosmetic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and compns. of ionic 1,4-dihydropyridine UV-A cosmetic or dermatol. sunscreens)

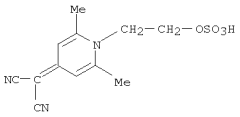
RN 863406-54-6 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-[2-(phosphonooxy)ethoxy]ethyl]-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA INDEX NAME)

RN 863406-60-4 CAPLUS
CN Pyridinium, 1-[2-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethoxy]ethyl]-, chloride (1:1) (CA INDEX NAME)



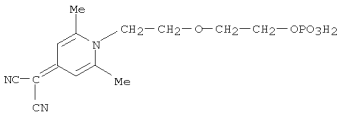
● Cl⁻

RN 863406-63-7 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, potassium salt (1:1) (CA INDEX NAME)



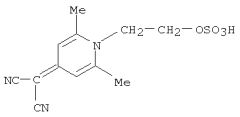
● K

RN 863406-64-8 CAPLUS
CN 1(4H)-Pyridinepropanaminium, 4-(dicyanomethylene)-N-[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-N,N,2,6-tetramethyl-, chloride (1:1) (CA INDEX NAME)



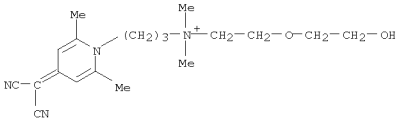
● Na

RN 863406-56-8 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA INDEX NAME)

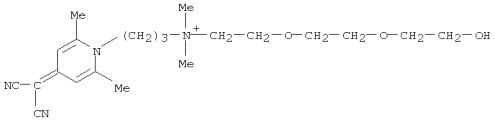


● Na

RN 863406-58-0 CAPLUS
CN 1(4H)-Pyridinepropanaminium, 4-(dicyanomethylene)-N-[2-(2-hydroxyethoxy)ethyl]-N,N,2,6-tetramethyl-, iodide (1:1) (CA INDEX NAME)

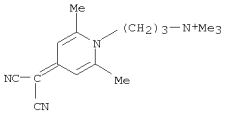


● I⁻



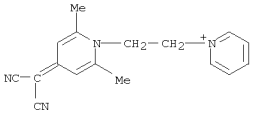
● Cl⁻

RN 863406-65-9 CAPLUS
CN 1(4H)-Pyridinepropanaminium, 4-(dicyanomethylene)-N,N,N,2,6-pentamethyl-, iodide (1:1) (CA INDEX NAME)



● I⁻

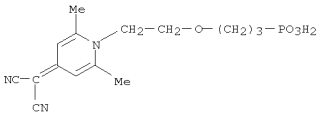
RN 863406-66-0 CAPLUS
CN Pyridinium, 1-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethyl]-, bromide (1:1) (CA INDEX NAME)



● Br⁻

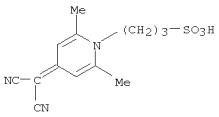
RN 863406-67-1 CAPLUS
CN Phosphonic acid, P-[3-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethoxy]propyl]-, sodium salt (1:1) (CA INDEX NAME)

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



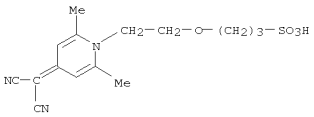
● Na

RN 863406-68-2 CAPLUS
CN 1(4H)-Pyridinepropanesulfonic acid, 4-(dicyanomethylene)-2,6-dimethyl-, potassium salt (1:1) (CA INDEX NAME)



● K

RN 863406-69-3 CAPLUS
CN 1-Propanesulfonic acid, 3-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethoxy]-, sodium salt (1:1) (CA INDEX NAME)

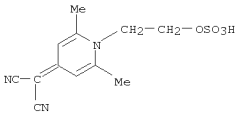


● Na

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
INDEX NAME)

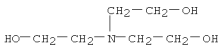
CM 1

CRN 863406-55-7
CMF C12 H13 N3 O4 S

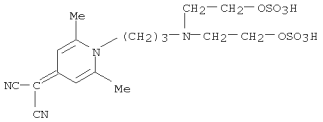


CM 2

CRN 102-71-6
CMF C6 H15 N O3



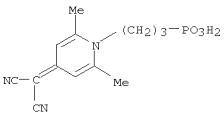
RN 863406-78-4 CAPLUS
CN Propanedinitrile, 2-[1-[3-[bis[2-(sulfooxy)ethyl]amino]propyl]-2,6-dimethyl-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 863406-79-5 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-[2-[2-[2-(sulfooxy)ethoxy]ethoxy]ethoxy]ethyl]-4(1H)-pyridinylidene]-, potassium salt (1:1) (CA INDEX NAME)

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RN 863406-70-6 CAPLUS
CN Phosphonic acid, P-[3-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]propyl]-, potassium salt (1:2) (CA INDEX NAME)

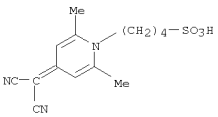


● 2 K

RN 863406-72-8 CAPLUS
CN 1(4H)-Pyridinebutanesulfonic acid, 4-(dicyanomethylene)-2,6-dimethyl-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (CA INDEX NAME)

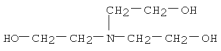
CM 1

CRN 863406-71-7
CMF C14 H17 N3 O3 S



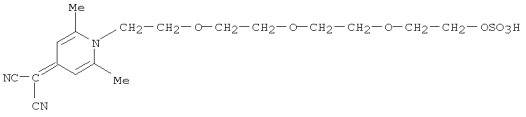
CM 2

CRN 102-71-6
CMF C6 H15 N O3



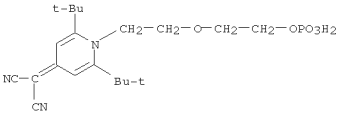
RN 863406-73-9 CAPLUS
CN Propanedinitrile, [2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (CA

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



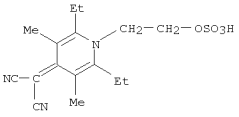
● K

RN 863406-80-8 CAPLUS
CN Propanedinitrile, 2-[2,6-bis(1,1-dimethylethyl)-1-[2-[2-(phosphonooxy)ethoxy]ethyl]-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA
INDEX NAME)



● Na

RN 863406-81-9 CAPLUS
CN Propanedinitrile, 2-[2,6-diethyl-3,5-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, potassium salt (1:1) (CA INDEX NAME)



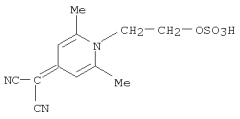
● K

RN 863407-00-5 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
pyridinylidene]-, compd. with 2-amino-2-methyl-1-propanol (1:1) (CA INDEX
NAME)

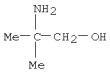
CM 1

CRN 863406-55-7
CMF C12 H13 N3 O4 S

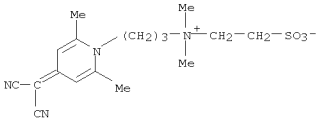


CM 2

CRN 124-68-5
CMF C4 H11 N O

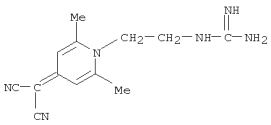


RN 863407-01-6 CAPLUS
CN 1(4H)-Pyridinepropanaminium,
4-(dicyanomethylene)-N,N,2,6-tetramethyl-N-(2-
sulfoethyl)-, inner salt (CA INDEX NAME)



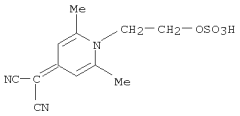
RN 863407-03-8 CAPLUS
CN Guanidine,
N-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethyl]-

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
, hydrochloride (1:1) (CA INDEX NAME)



● HCl

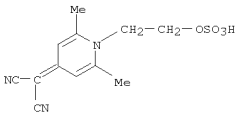
RN 924726-36-3 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-
pyridinylidene]-, ammonium salt (1:1) (CA INDEX NAME)



● NH_3

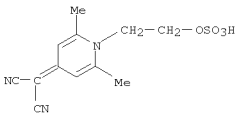
RN 924726-37-4 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-
pyridinylidene]-, lithium salt (1:1) (CA INDEX NAME)

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



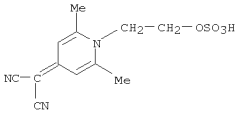
● Li

RN 924726-38-5 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-
pyridinylidene]-, magnesium salt (2:1) (CA INDEX NAME)



●1/2 Mg

RN 924726-39-6 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-
pyridinylidene]-, calcium salt (2:1) (CA INDEX NAME)

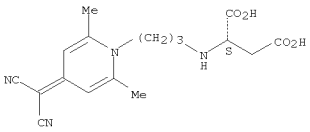


●1/2 Ca

RN 924726-40-9 CAPLUS
CN L-Aspartic acid, N-[3-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-
pyridinyl]propyl]-, sodium salt (1:2) (CA INDEX NAME)

Absolute stereochemistry.

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

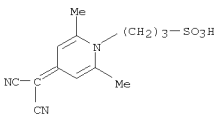


●2 Na

RN 924726-42-1 CAPLUS
CN 1(4H)-Pyridinepropanesulfonic acid, 4-(dicyanomethylene)-2,6-dimethyl-,
compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (CA INDEX NAME)

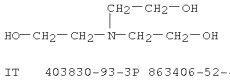
CM 1

CRN 863477-45-6
CMF C13 H15 N3 O3 S



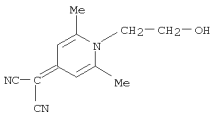
CM 2

CRN 102-71-6
CMF C6 H15 N O3

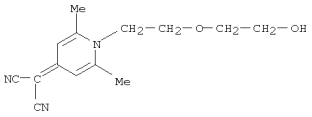


IT 403830-93-3P 863406-52-4P 863406-57-9P
863406-59-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation and compns. of ionic 1,4-dihydropyridine UV-A cosmetic or
dermatol. sunscreens)
RN 403830-93-3 CAPLUS
CN Propanedinitrile,
2-[1-(2-hydroxyethyl)-2,6-dimethyl-4(1H)-pyridinylidene]-
(CA INDEX NAME)

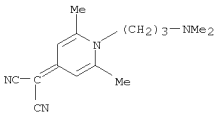
L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 863406-52-4 CAPLUS
CN Propanedinitrile, 2-[1-[2-(2-hydroxyethoxy)ethyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)

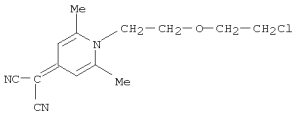


RN 863406-57-9 CAPLUS
CN Propanedinitrile, 2-[1-[3-(dimethylamino)propyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



RN 863406-59-1 CAPLUS
CN Propanedinitrile, 2-[1-[2-(2-chloroethoxy)ethyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)

L10 ANSWER 1 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



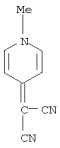
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:369395 CAPLUS
DOCUMENT NUMBER: 146:62556
TITLE: Reaction of pyridinium and quinolinium salts having the leaving group at the 2- or 4-position with active methylene compounds
AUTHOR(S): Fujita, Reiko; Hoshino, Masato; Tojyo, Yusuke; Kimura, Atsushi; Hongo, Hiroshi
CORPORATE SOURCE: Tohoku Pharmaceutical University, 4-4-1 Komatsushima, Aoba-ku, Sendai City, 981-8558, Japan
SOURCE: Yakugaku Zasshi (2006), 126(2), 99-108
CODEN: YKKZAJ; ISSN: 0031-6903
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
OTHER SOURCE(S): CASREACT 146:62556
GI

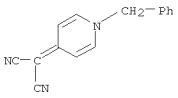
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The reactions of 2- or 4-cyanopyridinium salts (I) and (II) (R = Me, A = iodo; R = Bn, A = Br) with active methylene compds. of formula CH2XY [X = Y = CO2Me, cyano; XY = CO(CH2)3CO], namely di-Me malonate, malononitrile, and cyclohexane-1,3-dione, affording 2- or 4-(substituted methylene)pyridines (III), (IV), and (V) (R, X, Y = same as above) are described. Similar reactions of 4-cyano-2-methylthiopyridinium iodide (VI) and 4-cyano-2-methylthioquinolinium iodide (VII), both of which have two leaving groups, were readily prepared from 4-cyano-1-methyl-2(1H)-pyridone and 4-cyano-1-methyl-2(1H)-quinolone via 4-cyano-1-methyl-2(1H)-thiopyridone and 4-cyano-1-methyl-2(1H)-thioquinolone in two steps, proceeded at the 2- and/or 4-positions on the pyridine or quinoline rings to give 2- or 4-(substituted methylene)pyridines (VIII) and (IX) and 2- or 4-(substituted methylene)pyridines (X) and (XI) (X, Y = same as above).
IT 16344-72-2P, 4-(Dicyanomethylene)-1-methyl-1,4-dihydropyridine
916880-39-2P, 1-Benzyl-4-(dicyanomethylene)-1,4-dihydropyridine
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of methylenedihydropyridine - and dihydroquinoline derivs. by reaction of pyridinium and quinolinium salts having leaving group at the 2- or 4-position with active methylene compds.)
RN 16344-72-2 CAPLUS
CN Propanedinitrile, 2-(1-methyl-4(1H)-pyridinylidene)- (CA INDEX NAME)

L10 ANSWER 2 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



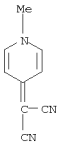
RN 916880-39-2 CAPLUS
CN Propanedinitrile, 2-[1-(phenylmethyl)-4(1H)-pyridinylidene]- (CA INDEX NAME)



L10 ANSWER 3 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:311855 CAPLUS
DOCUMENT NUMBER: 145:9165
TITLE: Atomistic Molecular Modeling of the Effect of Chromophore Concentration on the Electro-optic Coefficient in Nonlinear Optical Polymers
AUTHOR(S): Leahy-Hoppa, M. R.; Cunningham, P. D.; French, J. A.; Hayden, L. M.
CORPORATE SOURCE: Department of Physics, University of Maryland, Baltimore, MD, 21250, USA
SOURCE: Journal of Physical Chemistry A (2006), 110(17), 5792-5797
CODEN: JPCAFH; ISSN: 1089-5639
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We employ fully atomistic mol. modeling to investigate the concentration dependence of the electro-optic coefficient of two guest-host polymer composites. Using classical mol. dynamics, we record the time-evolution of the guest-host system under the application of an external elec. field.
Through anal. of the orientation of the nonlinear optical chromophores in the guest-host composite with respect to the direction of the external elec. field, we calculate the orientational parameter N < cos3θ >, with N being the number d. of chromophores in the composite. This parameter is
directly proportional to the electro-optic coefficient We find agreement between the concentration dependence of the electro-optic coefficient calculated through
our simulation and that from exptl. data and also from Monte Carlo models.

IT 16344-72-2
RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(atomistic mol. modeling of effect of chromophore concentration on electro-optic coefficient in nonlinear optical polymers)
RN 16344-72-2 CAPLUS
CN Propanedinitrile, 2-(1-methyl-4(1H)-pyridinylidene)- (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

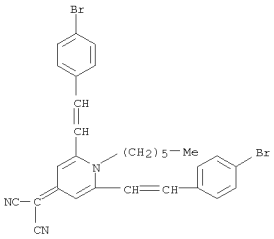
L10 ANSWER 3 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L10 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:24507 CAPLUS
DOCUMENT NUMBER: 144:293203
TITLE: Conjugated alternating copolymers of fluorenes and 2-pyridine-4-ylidenemalononitrile: synthesis, characterization and electroluminescent properties
AUTHOR(S): Peng, Qiang; Kang, E. T.; Neoh, K. G.; Xiao, Dan; Zou, Dechun
CORPORATE SOURCE: Department of Chemical and Biomolecular Engineering, National University of Singapore, 119260, Singapore
SOURCE: Journal of Materials Chemistry (2006), 16(4), 376-383
CODEN: JMACEP; ISSN: 0959-9428
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

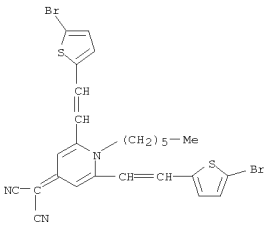
AB A new series of light-emitting conjugated copolymers based on fluorenes were synthesized via the Pd-catalyzed Suzuki coupling reaction. The copolymers were characterized by FT-IR, NMR, and elemental anal. All the copolymers were readily soluble in common organic solvents and had substantially
improved thermal properties. Cyclic voltammetry revealed that, with the incorporation of 2-[2,6-bis(2-arylvinyl)pyridine-4-ylidene]-malononitrile (BPM) donor-acceptor units in the polyfluorene backbone, these copolymers had low-lying LUMO energy levels ranging from -3.14 to -3.28 eV and raised
HOMO energy levels ranging from -5.43 to -5.64 eV. They are thus promising candidates for charge balanced electroluminescence (EL) in light-emitting diodes (LEDs). The copolymer films emit strong orange-red photoluminescence (PL) with maxima at 570-598 nm. Single-layer LEDs with the configuration of ITO/PEDOT/copolymer/Ca/Al were efficient yellow to orange-red emitters, with external quantum efficiencies of 0.43-1.06%.

IT 878554-48-4P 878554-51-9P
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(conjugated alternating copolymers of fluorene and 2-pyridine-4-ylidenemalononitrile: synthesis, characterization and electroluminescent properties)
RN 878554-48-4 CAPLUS
CN Propanedinitrile, 2-[2,6-bis[2-(4-bromophenyl)ethenyl]-1-hexyl-4(1H)-pyridinylidene]- (CA INDEX NAME)

L10 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 878554-51-9 CAPLUS
CN Propanedinitrile, 2-[2,6-bis[2-(5-bromo-2-thienyl)ethenyl]-1-hexyl-4(1H)-pyridinylidene]- (CA INDEX NAME)

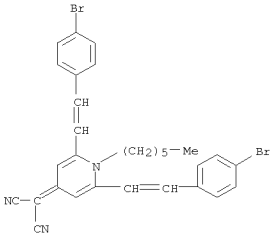


IT 878554-52-0P 878554-54-2P 878554-55-3P 878554-57-5P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(conjugated alternating copolymers of fluorene and 2-pyridine-4-ylidenemalononitrile: synthesis, characterization and electroluminescent properties)
RN 878554-52-0 CAPLUS
CN Propanedinitrile, [2,6-bis[2-(4-bromophenyl)ethenyl]-1-hexyl-4(1H)-pyridinylidene]-, polymer with 2,2'-(9,9-dihexyl-9H-fluorene-2,7-diyl)bis[1,3,2-dioxaborinane] (9CI) (CA INDEX NAME)

CM 1

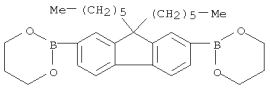
CRN 878554-48-4

L10 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CMF C30 H27 Br2 N3



CM 2

CRN 250597-29-6
CMF C31 H44 B2 O4



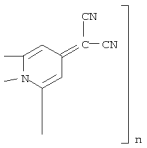
RN 878554-54-2 CAPLUS
CN Propanedinitrile, [2,6-bis[2-(5-bromo-2-thienyl)ethenyl]-1-hexyl-4(1H)-pyridinylidene]-, polymer with 2,2'-(9,9-dihexyl-9H-fluorene-2,7-diyl)bis[1,3,2-dioxaborinane] (9CI) (CA INDEX NAME)

CM 1

CRN 878554-51-9
CMF C26 H23 Br2 N3 S2

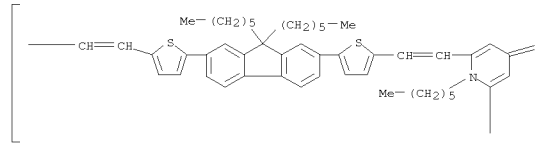
L10 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-B

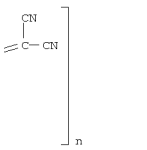


RN 878554-57-5 CAPLUS
CN Poly[[4-(dicyanomethylene)-1-hexyl-1,4-dihydro-2,6-pyridinediyl]-1,2-ethenediyl-2,5-thiophenediyl(9,9-dihexyl-9H-fluorene-2,7-diyl)-2,5-thiophenediyl-1,2-ethenediyl] (9CI) (CA INDEX NAME)

PAGE 1-A

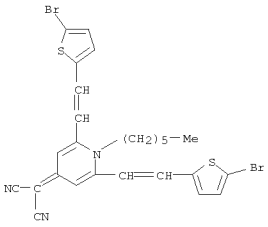


PAGE 1-B



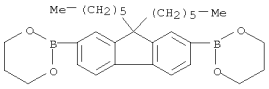
REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



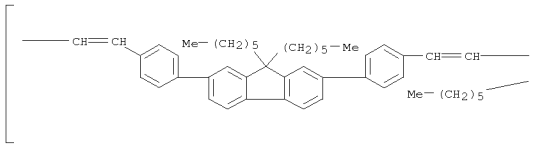
CM 2

CRN 250597-29-6
CMF C31 H44 B2 O4



RN 878554-55-3 CAPLUS
CN Poly[[4-(dicyanomethylene)-1-hexyl-1,4-dihydro-2,6-pyridinediyl]-1,2-ethenediyl-1,4-phenylene(9,9-dihexyl-9H-fluorene-2,7-diyl)-1,4-phenylene-1,2-ethenediyl] (9CI) (CA INDEX NAME)

PAGE 1-A

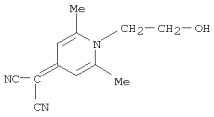


L10 ANSWER 5 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1075592 CAPLUS
DOCUMENT NUMBER: 143:372818
TITLE: UV absorbing chromophores covalently bonded to hyperbranched polymers for sunscreens
INVENTOR(S): Poschalko, Alexander; Huber, Ulrich; Schehlmann, Volker
PATENT ASSIGNEE(S): DSM Ip Assets B. V., Neth.
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

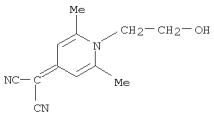
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005092282	A1	20051006	WO 2005-EP3117	20050323
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, MR, NE, SN, TD, TG				
AU 2005226922	A1	20051006	AU 2005-226922	20050323
EP 1727515	A1	20061206	EP 2005-716337	20050323
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1937999	A	20070328	CN 2005-80009487	20050323
JP 2007535588	T	20071206	JP 2007-504356	20050323
IN 2006DN05063	A	20070713	IN 2006-DN5063	20060901
KR 2007001199	A	20070103	KR 2006-719628	20060922
US 20080081025	A1	20080403	US 2006-593486	20061017
PRIORITY APPLN. INFO.:			EP 2004-7201 A	20040325
			WO 2005-EP3117 W	20050323

AB The invention provides a conjugate comprising a hyperbranched polymer covalently bonded to at least three UV absorbing chromophores having an UV absorption maximum λmax ≥ 270 nm. The conjugate is an effective and safe sunscreen which can advantageously be used in cosmetic compns. For example, poly(glycerol-b-propylene oxide) (5.0 g, 4.6 mmol) was activated with methanesulfonyl chloride (3.75 mL, 48.5 mmol) to afford 7.5 g mesylated poly(glycerol-b-propylene oxide). A polymeric UV filter was obtained by attaching 8.9 g of 4-(1,3-benzoxazol-2-yl)phenol to 7.48 g of the mesylated polymer to yield 4.82 g of the hyperbranched polymer chromophore with the theor. chromophore content of 64%. A composition was prepared by mixing the hyperbranched polymer chromophore 5.0 g, Brij 72 2.0

L10 ANSWER 5 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
g, Brij 721 2.0 g, Lanette O 2.0 g, Estol GMM 3650 2.0 g, BHT 0.05 g, and Phenonip 0.8 g at 80°, adding a preheated soln. of glycerin 4.0 g and EDTA BD 0.1 g in water 62.95 g, and subsequently 10% aq. KOH 0.1 g as well as Sepigel 305 1.0 g. An av. SPF was 6.6, compared to 6.8 of Parsol MCX.
IT 403830-93-3DP, reaction products with glycerol-propylene oxide block polymers
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(UV absorbing chromophores covalently bonded to hyperbranched polymers for sunscreens)
RN 403830-93-3 CAPLUS
CN Propanedinitrile, 2-[1-(2-hydroxyethyl)-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



IT 403830-93-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(UV absorbing chromophores covalently bonded to hyperbranched polymers for sunscreens)
RN 403830-93-3 CAPLUS
CN Propanedinitrile, 2-[1-(2-hydroxyethyl)-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



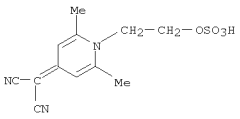
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:962216 CAPLUS
DOCUMENT NUMBER: 143:253492
TITLE: Preparation of ionic UVA sunscreens
INVENTOR(S): Berg-Schultz, Katja; Huber, Ulrich; Sprenger, Daniel
PATENT ASSIGNEE(S): DSM Ip Assets B. V., Neth.
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005080341	A1	20050901	WO 2005-EP1379	20050211
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005215881	A1	20050901	AU 2005-215881	20050211
EP 1716117	A1	20061102	EP 2005-701401	20050211
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1918126	A	20070221	CN 2005-80004920	20050211
JP 2007523078	T	20070816	JP 2006-552555	20050211
IN 2006CN02915	A	20070608	IN 2006-CN2915	20060809
US 20070275090	A1	20071129	US 2007-589051	20070326
PRIORITY APPLN. INFO.:			EP 2004-3294 A	20040213
			WO 2005-EP1379 W	20050211

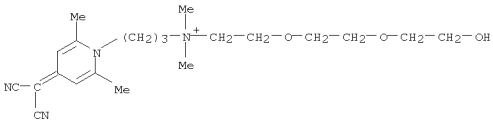
OTHER SOURCE(S): MARPAT 143:253492
AB The present invention relates to novel 1,4-dihydropyridine derivs., to novel cosmetic or dermatol. sunscreen compns. containing these derivs. and the use of these derivs. for photoprotecting human skin and/or hair against UV radiation, in particular solar radiation. Thus, a 4-dicaynomethylene-2,6-dimethyl-1,4-dihydropyridine-N(ethoxysulfate ester monosodium salt) was prepared in a series of steps starting from 4-dicyanomethylene-4H-pyran. The above product (3%) was used to form a sunscreen formulation.
IT 863406-63-7 863406-64-8 863406-65-9
863406-66-0 863406-67-1 863406-68-2
863406-69-3 863406-70-6 863406-72-8
863406-73-9 863406-78-4 863406-79-5
863406-80-8 863406-81-9 863406-82-0

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
863407-00-5 863407-01-6 863407-03-8
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(ionic UVA sunscreens and compns. contg. them)
RN 863406-63-7 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, potassium salt (1:1) (CA INDEX NAME)



● K

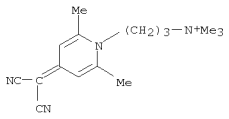
RN 863406-64-8 CAPLUS
CN 1(4H)-Pyridinepropanaminium, 4-(dicyanomethylene)-N-[2-[2-(2-hydroxyethoxy)ethoxy]ethyl]-N,N,2,6-tetramethyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

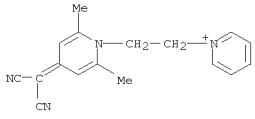
RN 863406-65-9 CAPLUS
CN 1(4H)-Pyridinepropanaminium, 4-(dicyanomethylene)-N,N,N,2,6-pentamethyl-, iodide (1:1) (CA INDEX NAME)

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



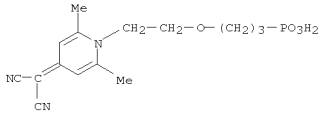
● I⁻

RN 863406-66-0 CAPLUS
CN Pyridinium, 1-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethyl]-, bromide (1:1) (CA INDEX NAME)



● Br⁻

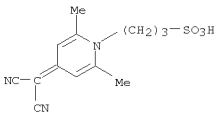
RN 863406-67-1 CAPLUS
CN Phosphonic acid, P-[3-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethoxy]propyl]-, sodium salt (1:1) (CA INDEX NAME)



● Na

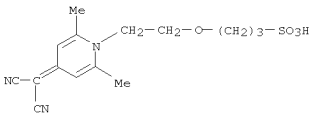
RN 863406-68-2 CAPLUS
CN 1(4H)-Pyridinepropanesulfonic acid, 4-(dicyanomethylene)-2,6-dimethyl-, potassium salt (1:1) (CA INDEX NAME)

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



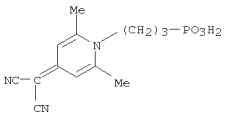
● K

RN 863406-69-3 CAPLUS
CN 1-Propanesulfonic acid, 3-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethoxy]-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 863406-70-6 CAPLUS
CN Phosphonic acid, P-[3-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]propyl]-, potassium salt (1:2) (CA INDEX NAME)

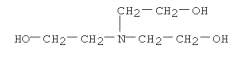


● 2 K

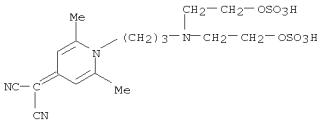
RN 863406-72-8 CAPLUS

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 102-71-6
CMF C6 H15 N O3

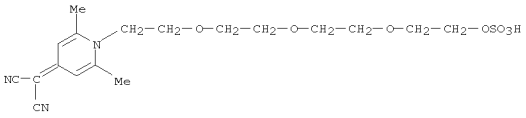


RN 863406-78-4 CAPLUS
CN Propanedinitrile, 2-[1-[3-[bis[2-(sulfooxy)ethyl]amino]propyl]-2,6-dimethyl-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA INDEX NAME)



● Na

RN 863406-79-5 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-[2-[2-[2-(sulfooxy)ethoxy]ethoxy]ethoxy]ethyl]-4(1H)-pyridinylidene]-, potassium salt (1:1) (CA INDEX NAME)



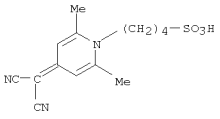
● K

RN 863406-80-8 CAPLUS
CN Propanedinitrile, 2-[2,6-bis(1,1-dimethylethyl)-1-[2-[2-(phosphonooxy)ethoxy]ethyl]-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA
INDEX NAME)

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN 1(4H)-Pyridinebutanesulfonic acid, 4-(dicyanomethylene)-2,6-dimethyl-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (CA INDEX NAME)

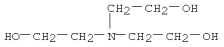
CM 1

CRN 863406-71-7
CMF C14 H17 N3 O3 S



CM 2

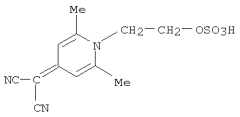
CRN 102-71-6
CMF C6 H15 N O3



RN 863406-73-9 CAPLUS
CN Propanedinitrile, [2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (CA INDEX NAME)

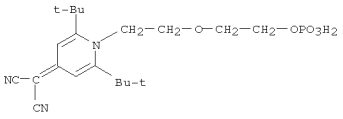
CM 1

CRN 863406-55-7
CMF C12 H13 N3 O4 S



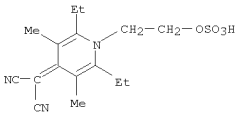
CM 2

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



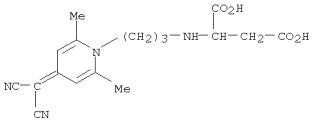
● Na

RN 863406-81-9 CAPLUS
CN Propanedinitrile, 2-[2,6-diethyl-3,5-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, potassium salt (1:1) (CA INDEX NAME)



● K

RN 863406-82-0 CAPLUS
CN Aspartic acid, N-[3-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]propyl]-, disodium salt (9CI) (CA INDEX NAME)



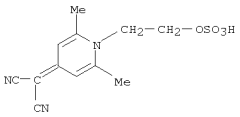
● 2 Na

RN 863407-00-5 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, compd. with 2-amino-2-methyl-1-propanol (1:1) (CA
INDEX

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
NAME)

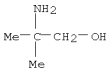
CM 1

CRN 863406-55-7
CMF C12 H13 N3 O4 S

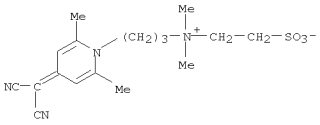


CM 2

CRN 124-68-5
CMF C4 H11 N O

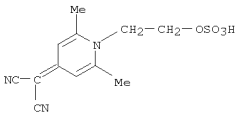


RN 863407-01-6 CAPLUS
CN 1(4H)-Pyridinepropanaminium, 4-(dicyanomethylene)-N,N,2,6-tetramethyl-N-(2-sulfoethyl)-, inner salt (CA INDEX NAME)



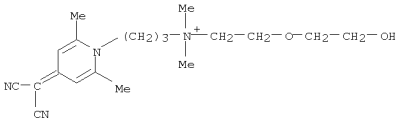
RN 863407-03-8 CAPLUS
CN Guanidine, N-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethyl]-, hydrochloride (1:1) (CA INDEX NAME)

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



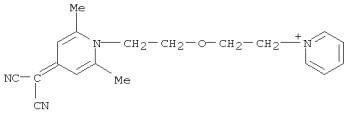
● Na

RN 863406-58-0 CAPLUS
CN 1(4H)-Pyridinepropanaminium, 4-(dicyanomethylene)-N-[2-(2-hydroxyethoxy)ethyl]-N,N,2,6-tetramethyl-, iodide (1:1) (CA INDEX NAME)



● I⁻

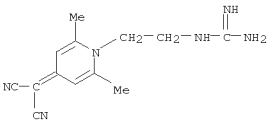
RN 863406-60-4 CAPLUS
CN Pyridinium, 1-[2-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethoxy]ethyl]-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

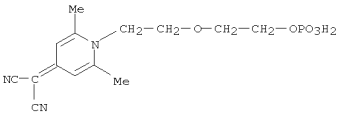
IT 403830-93-3P 863406-52-4P 863406-53-5P
863406-55-7P 863406-57-9P 863406-59-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● HCl

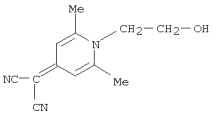
IT 863406-54-6P 863406-56-8P 863406-58-0P
863406-60-4P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(ionic UVA sunscreens and compns. containing them)
RN 863406-54-6 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-[2-(phosphonooxy)ethoxy]ethyl]-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA INDEX NAME)



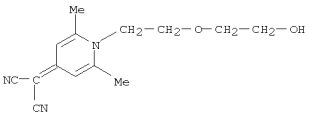
● Na

RN 863406-56-8 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]-, sodium salt (1:1) (CA INDEX NAME)

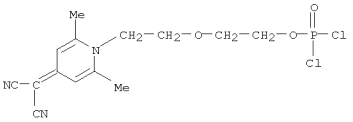
L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(ionic UVA sunscreens and compns. contg. them)
RN 403830-93-3 CAPLUS
CN Propanedinitrile, 2-[1-(2-hydroxyethyl)-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



RN 863406-52-4 CAPLUS
CN Propanedinitrile, 2-[1-[2-(2-hydroxyethoxy)ethyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)

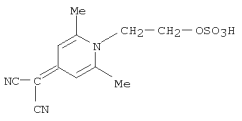


RN 863406-53-5 CAPLUS
CN Phosphorodichloridic acid, 2-[2-[4-(dicyanomethylene)-2,6-dimethyl-1(4H)-pyridinyl]ethoxy]ethyl ester (9CI) (CA INDEX NAME)

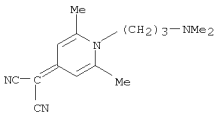


RN 863406-55-7 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-[2-(sulfooxy)ethyl]-4(1H)-pyridinylidene]- (CA INDEX NAME)

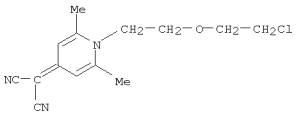
L10 ANSWER 6 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 863406-57-9 CAPLUS
CN Propanedinitrile, 2-[1-[3-(dimethylamino)propyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



RN 863406-59-1 CAPLUS
CN Propanedinitrile, 2-[1-[2-(2-chloroethoxy)ethyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



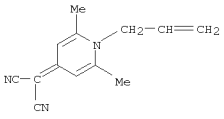
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L10 ANSWER 7 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:523247 CAPLUS
DOCUMENT NUMBER: 143:65134
TITLE: Microcapsules with UV filter activity
INVENTOR(S): Berg-Schultz, Katja
PATENT ASSIGNEE(S): DSM IP Assets B. V., Neth.
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

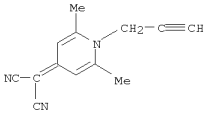
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005053631	A1	20050616	WO 2004-EP13734	20041202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1722863	A1	20061122	EP 2004-803467	20041202
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1889920	A	20070103	CN 2004-80036134	20041202
JP 2007519617	T	20070719	JP 2006-541904	20041202
IN 2006CN01952	A	20070608	IN 2006-CN1952	20060602
US 20070190325	A1	20070816	US 2007-581511	20070227
PRIORITY APPLN. INFO.:			EP 2003-27847 A	20031204
			WO 2004-EP13734 W	20041202

AB The invention provides a process for producing microcapsules with UV filter activity, wherein at least one type of crosslinkable chromophore with UV-A and/or UV-B and/or UV-C filter activity and optionally at least one type of crosslinkable monomer which does not have UV-A and/or UV-B and/or UV-C filter activity are subjected to a crosslinking reaction in the absence of non-crosslinkable chromophores with UV-A and/or UV-B and/or UV-C filter activity and microcapsules obtainable by this process. Thus, 2-[4-[2-(triethoxysilyl)prop-2-enyloxy]benzylidene]malonic acid di-Et ester (I) was prepared by the treatment of [[4-(2-propynyloxy)phenyl]methylene]propanedioic acid di-Et ester with triethoxysilane. Microcapsules were obtained from I and tetraethoxysilane. Sunscreens comprised I 10.00% in addition to the conventional sunscreen emulsion components.
IT 853933-45-6 853933-46-7
RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process); USES

L10 ANSWER 7 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(Uses)
(microcapsules with UV filter activity)
RN 853933-45-6 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-(2-propen-1-yl)-4(1H)-pyridinylidene]- (CA INDEX NAME)

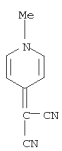


RN 853933-46-7 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-(2-propyn-1-yl)-4(1H)-pyridinylidene]- (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L10 ANSWER 8 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:670087 CAPLUS
DOCUMENT NUMBER: 141:429236
TITLE: Atomistic molecular modeling of electric field poling of nonlinear optical polymers
AUTHOR(S): Leahy, Megan R.; Hayden, L. Michael
CORPORATE SOURCE: Physics Department, University of Baltimore County, Baltimore, MD, 21250, USA
SOURCE: PMSE Preprints (2004), 91, 269-270
CODEN: PPMRA9; ISSN: 1550-6703
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English
AB Fully atomistic mol. modeling methods were used to examine the elec. field-induced alignment of nonlinear optical (NLO) chromophores, methylpyridinemalonitrile (DNVMP) and DPNA embedded in PMMA host. The induced polar order was determined by calculating the average of $\cos^3\theta$, where θ is the angle between the direction of the dipole moment of the chromophore and the direction of the applied elec. field. This order parameter was compared to that predicted by a non-interacting rigid gas model and to a model allowing for corrections due to intermol. electrostatic interactions. The ordering of the chromophores was studied as a function of chromophore concentration, size, and dipole moment.
IT 16344-72-2
RL: PRP (Properties)
(elec. field induced polar order of NLO chromophores in polymer dispersions vs. concentration and mol. size)
RN 16344-72-2 CAPLUS
CN Propanedinitrile, 2-(1-methyl-4(1H)-pyridinylidene)- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L10 ANSWER 9 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:656538 CAPLUS
DOCUMENT NUMBER: 139:202103
TITLE: Sunscreen compositions as well as dihydropyridines and dihydropyranes
INVENTOR(S): Berg-Schultz, Katja
PATENT ASSIGNEE(S): Roche Vitamins A.-G., Switz.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068183	A1	20030821	WO 2003-EP1049	20030204
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2473228	A1	20030821	CA 2003-2473228	20030204
AU 2003206825	A1	20030904	AU 2003-206825	20030204
AU 2003206825	B2	20070920		
EP 1474098	A1	20041110	EP 2003-704523	20030204
EP 1474098	B1	20060802		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003007335	A	20041207	BR 2003-7335	20030204
CN 1630504	A	20050622	CN 2003-803694	20030204
JP 2005518425	T	20050623	JP 2003-567367	20030204
AT 334724	T	20060815	AT 2003-704523	20030204
ES 2269978	T3	20070401	ES 2003-704523	20030204
IN 2004CN01768	A	20060224	IN 2004-CN1768	20040806
US 20050019278	A1	20050127	US 2004-494500	20040917

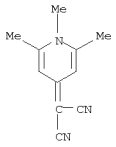
PRIORITY APPLN. INFO.: EP 2002-2093 A 20020212
WO 2003-EP1049 W 20030204

OTHER SOURCE(S): MARPAT 139:202103

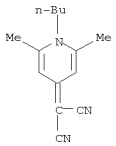
AB Disclosed are 1,4-dihydropyridine and 1,4-dihydropyrane derivs. and novel cosmetic or dermatol. sunscreen compns. containing novel and/or known 1,4-dihydropyridine or 1,4-dihydropyrane derivs. which are useful for photoprotecting human skin and/or hair against UV radiation, in particular solar radiation, and the use of such 1,4-dihydropyridine and/or 1,4-dihydropyrane derivs. as UV-A screening agents, particularly in cosmetic and pharmaceutical compns. For example, 1-N-(2-ethylhexyl)-4-dicyanomethylene-2,6-dimethyl-1,4-dihydropyridine and ethyl(2,6-dimethylpyran-4-ylidene)cyanoacetate were prepd. and included in cosmetics as sunscreen agents.

IT 16344-75-5P 49810-95-9P 582297-74-3P
582297-75-4P 582297-76-5P 582297-77-6P
582297-79-8P
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(sunscreens comprising dihydropyridines or dihydropyranes)

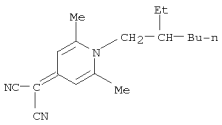
RN 16344-75-5 CAPLUS
CN Propanedinitrile, (1,2,6-trimethyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)



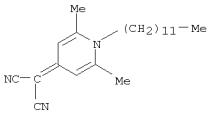
RN 49810-95-9 CAPLUS
CN Propanedinitrile, (1-butyl-2,6-dimethyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)



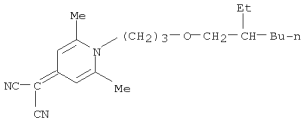
RN 582297-74-3 CAPLUS
CN Propanedinitrile, 2-[1-(2-ethylhexyl)-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



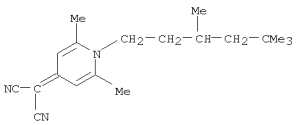
RN 582297-75-4 CAPLUS
CN Propanedinitrile, 2-(1-dodecyl-2,6-dimethyl-4(1H)-pyridinylidene)- (CA INDEX NAME)



RN 582297-76-5 CAPLUS
CN Propanedinitrile, 2-[1-[3-[(2-ethylhexyl)oxy]propyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)



RN 582297-77-6 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-(3,5,5-trimethylhexyl)-4(1H)-pyridinylidene]- (CA INDEX NAME)



L10 ANSWER 9 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 582297-75-4 CAPLUS
CN Propanedinitrile, 2-(1-dodecyl-2,6-dimethyl-4(1H)-pyridinylidene)- (CA INDEX NAME)

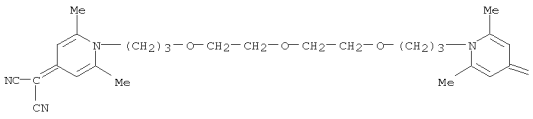
RN 582297-76-5 CAPLUS
CN Propanedinitrile, 2-[1-[3-[(2-ethylhexyl)oxy]propyl]-2,6-dimethyl-4(1H)-pyridinylidene]- (CA INDEX NAME)

RN 582297-77-6 CAPLUS
CN Propanedinitrile, 2-[2,6-dimethyl-1-(3,5,5-trimethylhexyl)-4(1H)-pyridinylidene]- (CA INDEX NAME)

L10 ANSWER 9 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 582297-79-8 CAPLUS
CN Propanedinitrile, 2,2'-[oxybis[2,1-ethanediyloxy-3,1-propanediyl(2,6-dimethyl-1(4H)-pyridinyl-4-ylidene)]]bis- (9CI) (CA INDEX NAME)

PAGE 1-A

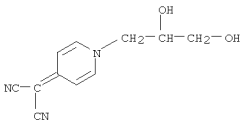


PAGE 1-B

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:664786 CAPLUS
DOCUMENT NUMBER: 136:20953
TITLE: Simple zwitterionic merocyanines as potential NLO chromophores
AUTHOR(S): Kay, A. J.; Woolhouse, A. D.; Gainsford, G. J.; Haskell, T. G.; Wyss, C. P.; Giffin, S. M.; McKinnie, I. T.; Barnes, T. H.
CORPORATE SOURCE: Industrial Research Limited, Lower Hutt, N. Z.
SOURCE: Journal of Materials Chemistry (2001), 11(9), 2271-2281
CODEN: JMACEP; ISSN: 0959-9428
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:20953
AB A suite of zwitterionic pyridylidene-based merocyanines that contain no interconnecting π-bridge between the donor and acceptor rings has been synthesized and their second-order NLO properties evaluated largely by semi-empirical computational methods (MOPAC 97/AM1). Contrary to expectation, increasing the degree of inter-ring twist (θ), at least up to 55°, in these new pyridylideneazolone chromophores is found to have little or no effect on the figure of merit [μβ(0)]. An X-ray crystallog. appraisal of one of these chromophores, , reveals however that the twist angle (albeit in the solid state) is greater than that predicted by computation and that all other features are consistent with the highly zwitterionic nature of these systems. In spite of this, a combination of factors-insufficient acceptor strength, insufficient extent of conjugation and perhaps insufficient twist angle, in particular - clearly leads to the low values of the quadratic hyperpolarizabilities. The trade-off between targeting a more modest hyperpolarizability term from a min. of π-conjugating framework between donor and acceptor (and therefore synthetic expediency) and seeking a moderate-to-high dipole moment has therefore resulted in only low figures of merit for these systems. Calcns. performed on a suite of readily accessible, isoelectronic cyanines, in which the acceptor is a stabilized cyclopentadienide carbocycle rather than a heterocycle, have revealed the potential that these systems have as NLO chromophores. Representative polymer-tetherable derivs. of this system have been prepared as have the corresponding TDI-based polyurethanes.
IT 377743-32-3P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(light tan dye; preparation of simple zwitterionic merocyanines as potential NLO chromophores)
RN 377743-32-3 CAPLUS
CN Propanedinitrile, 2-[1-(2,3-dihydroxypropyl)-4(1H)-pyridinylidene]- (CA INDEX NAME)

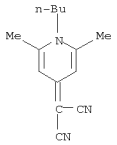
L10 ANSWER 10 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:451746 CAPLUS
DOCUMENT NUMBER: 131:287731
TITLE: Highly transparent and birefringent chromophores for organic photorefractive materials
AUTHOR(S): Wortmann, R.; Glania, C.; Kramer, P.; Lukaszuk, K.; Matschiner, R.; Twieg, R. J.; You, F.
CORPORATE SOURCE: Institute of Physical Chemistry, University of Mainz, Mainz, D-55099, Germany
SOURCE: Chemical Physics (1999), 245(1-3), 107-120
CODEN: CMPHC2; ISSN: 0301-0104
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of chromophores for application in organic photorefractive (PR) materials is investigated by electrooptical absorption measurements (EOAM). This exptl. technique yields information on the transition dipole moment μag, the ground-state dipole moment μg, and the change of the dipole moment upon optical excitation Δμ within the intense charge-transfer band of the dyes. It is shown that the results of the EOAM experiment allow us to estimate the PR figures-of-merit (FOMs) of the chromophores by either perturbational two-level equations or Kramers-Kronig transformation. In particular, chromophores based on the heterocyclic dihydropyran and dihydropyridine groups in combination with dicyano and cyanocarboxy acceptor units were investigated. These donor-acceptor pairs yield chromophores close to the 'cyanine limit' that is characterized by a small dipole difference, but a large ground-state dipole moment and a large polarizability anisotropy. This leads to very high PR FOMs of the new PR chromophores that are demonstrated to be superior to conventional second-order nonlinear optical chromophores in situations where the medium has a low glass transition.
IT 49810-95-9
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(transparent and birefringent chromophore for organic photorefractive materials)
RN 49810-95-9 CAPLUS
CN Propanedinitrile, (1-butyl-2,6-dimethyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)

L10 ANSWER 11 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

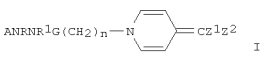


REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 12 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:314990 CAPLUS
DOCUMENT NUMBER: 126:299643
ORIGINAL REFERENCE NO.: 126:57885a,57888a
TITLE: Silver halide photographic element containing arylhydrazine
INVENTOR(S): Delprato, Ivano; Cogliolo, Isabella
PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 763771	A1	19970319	EP 1995-114618	19950918
R: DE, FR, GB, IT				
PRIORITY APPLN. INFO.:			EP 1995-114618	19950918

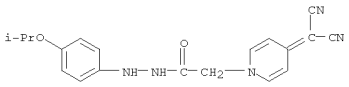
OTHER SOURCE(S): MARPAT 126:299643
GI



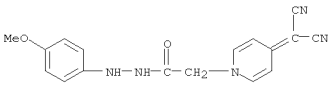
I

AB The present invention relates to a silver halide photog. element comprising a support bearing at least one silver halide emulsion layer including neg. surface latent image-type silver halide grains in reactive association (prior to imagewise exposure) with a hydrazine compound represented by the formula I (A = aryl; G = CO, SO, SO2, PO2, PO3, or C=NR2; R, R1, R2 = H, alkyl of 1 to 6 carbon atoms, alkylsulfinyl of 1 to 6 carbon atoms, or trifluoroacetyl; n = an integer from 1 to 3; Z1, Z2 = an electron-withdrawing group). The silver halide photog. element can be developed with a conventional alkaline rapid access-type developer solution, at a pH value lower than 11.0, containing a developing agent and an auxiliary developing agent to give high-contrast images.
IT 189037-69-2
RL: TEM (Technical or engineered material use); USES (Uses)
(high-contrast black-and-white silver halide photog. films for lithog. containing)
RN 189037-69-2 CAPLUS
CN 1(4H)-Pyridineacetic acid, 4-(dicyanomethylene)-, 2-[4-(1-methylethoxy)phenyl]hydrazide (CA INDEX NAME)

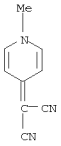
L10 ANSWER 12 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 189037-68-1
RL: TEM (Technical or engineered material use); USES (Uses)
(preparation and use in high-contrast black-and-white silver halide photog.
films for lithog.)
RN 189037-68-1 CAPLUS
CN 1(4H)-Pyridineacetic acid, 4-(dicyanomethylene)-, 2-(4-methoxyphenyl)hydrazide (CA INDEX NAME)



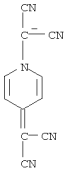
L10 ANSWER 13 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:101669 CAPLUS
DOCUMENT NUMBER: 114:101669
ORIGINAL REFERENCE NO.: 114:17325a,17328a
TITLE: Reaction of 4-methylthio- and 4-chloropyridinium salts with active methylene compounds
AUTHOR(S): Fujita, Reiko; Sakamura, Sachie; Tomisawa, Hiroshi
CORPORATE SOURCE: Tohoku Coll. Pharm., Sendai, 981, Japan
SOURCE: Annual Report of the Tohoku College of Pharmacy (1989), (36), 117-22
CODEN: TYKNAQ; ISSN: 0495-7342
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Reaction of 4-methylthio- and 4-chloro-1-methylpyridinium iodides with active methylene compds. such as Me malonate, Me cyanoacetate, and malononitrile in THF in the presence of sodium hydride gave 1,4-dihydro-1-methyl-4-alkylidenepyridines in 61.4-98.5% yields. Similar reaction of quinolinium salts gave the resp. 4-alkylidenequinolines. The 1H NMR spectrum of 4-dycyanomethylene-1,4-dihydro-1-methylpyridine is compared with those of 1-methyl-4(1H)-pyridone and -thiopyridone.
IT 16344-72-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 16344-72-2 CAPLUS
CN Propanedinitrile, 2-(1-methyl-4(1H)-pyridinylidene)- (CA INDEX NAME)



L10 ANSWER 14 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:602509 CAPLUS
DOCUMENT NUMBER: 109:202509
ORIGINAL REFERENCE NO.: 109:33333a,33336a
TITLE: Crystal structures and electronic properties of organic conductors based on AzaTCNQ
AUTHOR(S): Urayama, Hatsumi; Inabe, Tamotsu; Mori, Takehiko; Maruyama, Yusei; Saito, Gunzi
CORPORATE SOURCE: Inst. Mol. Sci., Okazaki, 444, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1988), 61(6), 1831-6
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
AB AzaTCNQ ((4-dicyanomethyl-1-pyridinio)dicyanomethanide) is employed as an organic acceptor to form new organic conductors with a TTF family such as TTF, TMTTF, TMTSF, HMTTF, and DBTTF. Among them, TMTTF and TMTSF give 2:1 single crystals and the latter affords the most conductive complex, showing a metallic characteristic down to 150 K. This can be observed by measuring the thermoelec. power and the ESR spectra. A crystal structure anal. indicates that only TMTSF mols. stack to form one-dimensional conduction pathways, while AzaTCNQ mols. are arranged side-by-side and oriented almost perpendicular to the donor mols. There exists an orientational disorder of the nitrogen atom in the pyridine skeleton of an AzaTCNQ mol., which may be associated with the weak temperature dependence of the elec. conductivity
IT 93179-09-0
RL: USES (Uses)
(in preparation of azaTCNQ-based organic conductors)
RN 93179-09-0 CAPLUS
CN Pyridinium, 1-methyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84662-81-7
CMF C11 H4 N5



CM 2

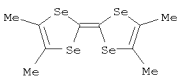
L10 ANSWER 14 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 694-56-4
CMF C6 H8 N

IT 108793-76-6 108793-78-8
RL: PRP (Properties)
(organic conductors, structure and elec. properties of)
RN 108793-76-6 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), salt with 2-(4,5-dimethyl-1,3-diselenol-2-ylidene)-1,3-diselenole (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 55259-49-9
CMF C10 H12 Se4



CM 2

CRN 108793-75-5
CMF C11 H4 N5 . C10 H12 Se4

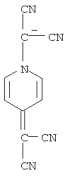
CM 3

CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 14 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

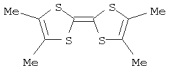
CM 3

CRN 84662-81-7
CMF C11 H4 N5

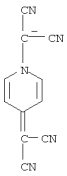


CM 4

CRN 52597-32-7
CMF C10 H12 S4
CCI RIS

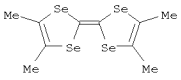


L10 ANSWER 14 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 4

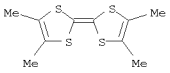
CRN 73261-22-0
CMF C10 H12 Se4
CCI RIS



RN 108793-78-8 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), salt with 2-(4,5-dimethyl-1,3-dithiol-2-ylidene)-4,5-dimethyl-1,3-dithiole (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 50708-37-7
CMF C10 H12 S4



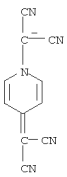
CM 2

CRN 108793-77-7
CMF C11 H4 N5 . C10 H12 S4

L10 ANSWER 15 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1987:416074 CAPLUS
DOCUMENT NUMBER: 107:16074
ORIGINAL REFERENCE NO.: 107:2579a,2582a
TITLE: New organic conductors based on AzaTCNQ
AUTHOR(S): Urayama, H.; Saito, G.; Inabe, T.; Mori, T.; Maruyama, Y.
CORPORATE SOURCE: Inst. Solid State Phys., Univ. Tokyo, Tokyo, 106, Japan
SOURCE: Synthetic Metals (1987), 19(1-3), 469-74
CODEN: SYMEDZ; ISSN: 0379-6779
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Complexes of AzaTCNQ(4-dicyanomethylenepyridinium dicyanomethylide) with the TTF family were examined as a new candidate for organic conductors. The tetramethyltetraselenafulvalene complex had high conductivity, and the metallic character was confirmed by thermoelec.-power and ESR measurements. The stoichiometry is 2:1, and the structural study shows that only donor mols. form a 1-dimensional stack of conduction, while the AzaTCNQ mol. plane is oriented parallel to the donor stack. The orientational disorder of AzaTCNQ presumably causes the weak temperature dependence of charge transport.
IT 108793-70-0 108793-72-2 108793-74-4
108793-76-6 108793-78-8
RL: PRP (Properties)
(elec. conductive)
RN 108793-70-0 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), salt with 2-(1,3-dithiol-2-ylidene)-1,3-dithiole (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84662-81-7
CMF C11 H4 N5



CM 2

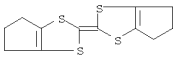
CRN 35079-56-2
CMF C6 H4 S4

L10 ANSWER 15 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CCI RIS

RN 108793-72-2 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), salt with 2-(5,6-dihydro-4H-cyclopenta-1,3-dithiol-2-ylidene)-5,6-dihydro-4H-cyclopenta-1,3-dithiole (9CI) (CA INDEX NAME)

CM 1

CRN 57512-84-2
CMF C12 H12 S4

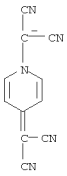


CM 2

CRN 108793-71-1
CMF C12 H12 S4 . C11 H4 N5

CM 3

CRN 84662-81-7
CMF C11 H4 N5

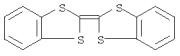


CM 4

L10 ANSWER 15 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 4

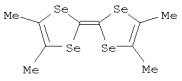
CRN 35079-60-8
CMF C14 H8 S4
CCI RIS



RN 108793-76-6 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), salt with 2-(4,5-dimethyl-1,3-diselenol-2-ylidene)-1,3-diselenole (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 55259-49-9
CMF C10 H12 Se4

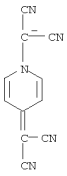


CM 2

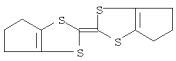
CRN 108793-75-5
CMF C11 H4 N5 . C10 H12 Se4

CM 3

CRN 84662-81-7
CMF C11 H4 N5



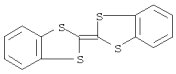
L10 ANSWER 15 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CRN 57527-01-2
CMF C12 H12 S4
CCI RIS



RN 108793-74-4 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), salt with 2-(1,3-benzodithiol-2-ylidene)-1,3-benzodithiole (9CI) (CA INDEX NAME)

CM 1

CRN 24648-13-3
CMF C14 H8 S4

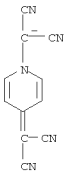


CM 2

CRN 108793-73-3
CMF C14 H8 S4 . C11 H4 N5

CM 3

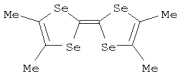
CRN 84662-81-7
CMF C11 H4 N5



L10 ANSWER 15 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 4

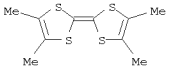
CRN 73261-22-0
CMF C10 H12 Se4
CCI RIS



RN 108793-78-8 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), salt with 2-(4,5-dimethyl-1,3-dithiol-2-ylidene)-4,5-dimethyl-1,3-dithiole (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 50708-37-7
CMF C10 H12 S4



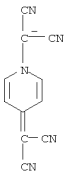
CM 2

CRN 108793-77-7
CMF C11 H4 N5 . C10 H12 S4

CM 3

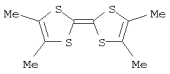
CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 15 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 4

CRN 52597-32-7
CMF C10 H12 S4
CCI RIS

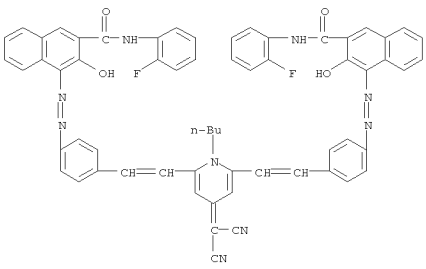


L10 ANSWER 16 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:462545 CAPLUS
DOCUMENT NUMBER: 103:62545
ORIGINAL REFERENCE NO.: 103:9945a,9948a
TITLE: Photoconductor compositions
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60083035	A	19850511	JP 1983-191244	19831013
JP 02014696	B	19900409		
US 4598033	A	19860701	US 1984-660572	19841012
PRIORITY APPLN. INFO.:			JP 1983-191244 A	19831013

GI For diagram(s), see printed CA Issue.
AB Photoconductor compns. contain a bisazo compound I [X = O, S, Se, NR9; R = II, III, IV, V, CH(COMe)CONR13R14; R1-R4 = H, alkyl, aryl; R2R5 or R3R6 combination may complete a carbocyclic ring; R5,R6 = H when R2R5 or R3R6 rings are not formed; R7,R8 = electron attractive group; R7R8 may combine to form a ring; R9 = alkyl, aryl, aralkyl, alkenyl, alkynyl; R10 = CONR14R15, CO2R15; R11 = H, alkyl, Ph; R12 = H, lower alkyl, carbamoyl, CO2H, alkoxycarbonyl, aryloxycarbonyl; R13,R15 = H, alkyl, aryl, heterocyclyl; R14 = H, alkyl, Ph; A = aromatic or heterocyclic ring; m,n = 0,1,2]. Thus, VI, 4,4'-bis(diethylamino)-2,2'-dimethyltriphenylmethane and a polycarbonate resin were dissolved in CH2Cl2 and coated on a conductive film support to give an electrophotog. plate having good sensitivity.
IT 97568-89-3
RL: USES (Uses)
(electrophotog. photoconductor compns. containing)
RN 97568-89-3 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[[1-butyl-4-(dicyanomethylene)-1,4-dihydro-2,6-pyridinediyl]bis(2,1-ethenediyl-4,1-phenyleneazo)]bis[N-(2-fluorophenyl)-3-hydroxy- (9CI) (CA INDEX NAME)

L10 ANSWER 16 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

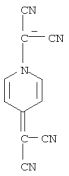


L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1985:24036 CAPLUS
DOCUMENT NUMBER: 102:24036
ORIGINAL REFERENCE NO.: 102:3951a,3954a
TITLE: Preparation and properties of AzaTCNQ- anion salts and mixed AzaTCNQ-/TCNQ·- salts of N-alkylpyridinium and related cations
AUTHOR(S): Tanaka, Hirohisa; Matsubayashi, Genetsu; Tanaka, Toshio
CORPORATE SOURCE: Fac. Eng., Osaka Univ., Suita, 565, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1984), 57(8), 2198-202
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
AB [Cation]+ ATCNQ--type salts [I; cation = N-alkylpyridinium, 4-cyano-N-alkylpyridinium, (4-methyl-1-pyrazinio)dicyanomethanide, N-alkylquinolinium (alkyl = Me, Et), N-methylacridinium and -phenazinium; ATCNQ- = [4-(dicyanomethyl)-1-pyridinio]dicyanomethanide anion, so-called AzaTCNQ- anion] were prepared Elec. resistivities of these salts as compacted samples were 106-109 Ωcm at 25°. [Cation]+ (ATCNQ-)0.1(TCNQ•-)8.9 (cation = N-methyl- and N-ethylpyridinium, N-ethylquinolinium) and [N-methylquinolinium]+ (ATCNQ-)0.17(TCNQ•-)0.83, whose elec. resistivities (104-106 Ωcm at 25°) are somewhat smaller than those of the corresponding TCNQ•- salts, were also prepared Stackings of ATCNQ- and TCNQ•- anions are discussed on the basis of electronic reflectance and ESR spectra. I salts react with iodine in hexane to give I.Ix (cation = N-methyl- and N-ethylpyridinium and -quinolinium; x = 3.2-3.9), whose elec. resistivities (104-106 Ωcm at 25°) are lower by a factor of 102-103 than those of the undoped I.
IT 93179-09-0P 93179-10-3P 93179-11-4P
93179-12-5P 93179-14-7P 93179-15-8P
93179-16-9P 93179-17-0P 93179-18-1P
93179-19-2P 93179-20-5P 93179-21-6P
93179-22-7P 93179-23-8P 93179-24-9P
93179-25-0P 93179-26-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, spectra, and elec. conductivity of)
RN 93179-09-0 CAPLUS
CN Pyridinium, 1-methyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



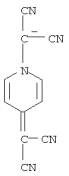
CM 2

CRN 694-56-4
CMF C6 H8 N

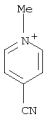
RN 93179-10-3 CAPLUS
CN Pyridinium, 1-ethyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84662-81-7
CMF C11 H4 N5



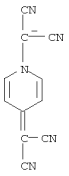
L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 93179-12-5 CAPLUS
CN Pyridinium, 4-cyano-1-ethyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

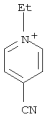
CM 1

CRN 84662-81-7
CMF C11 H4 N5



CM 2

CRN 45821-46-3
CMF C8 H9 N2



RN 93179-14-7 CAPLUS
CN Pyrazinium, 1-(dicyanomethylene)-1,4-dihydro-4-methyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

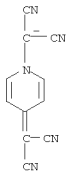
CM 2

CRN 15302-96-2
CMF C7 H10 N

RN 93179-11-4 CAPLUS
CN Pyridinium, 4-cyano-1-methyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84662-81-7
CMF C11 H4 N5

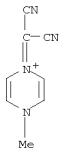


CM 2

CRN 13441-45-7
CMF C7 H7 N2

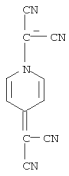
L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 93179-13-6
CMF C8 H7 N4



CM 2

CRN 84662-81-7
CMF C11 H4 N5

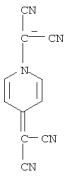


RN 93179-15-8 CAPLUS
CN Quinolinium, 1-methyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



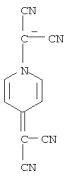
CM 2

CRN 21979-19-1
CMF C10 H10 N

RN 93179-16-9 CAPLUS
CN Quinolinium, 1-ethyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 84662-81-7
CMF C11 H4 N5

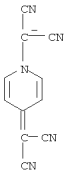


L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 93179-18-1 CAPLUS
CN Phenazinium, 5-methyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

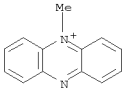
CM 1

CRN 84662-81-7
CMF C11 H4 N5



CM 2

CRN 7432-06-6
CMF C13 H11 N2



RN 93179-19-2 CAPLUS
CN Pyridinium, 1-methyl-, salt with 2,2'-(2,5-cyclohexadiene-1,4-diylidene)bis[propanedinitrile], compd. with 1-methylpyridinium salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (9CI) (CA INDEX NAME)

CM 1

CRN 93179-09-0
CMF C11 H4 N5 . C6 H8 N

CM 2

CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

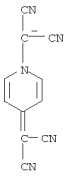
CM 2

CRN 48122-97-0
CMF C11 H12 N

RN 93179-17-0 CAPLUS
CN Acridinium, 10-methyl-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

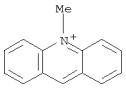
CM 1

CRN 84662-81-7
CMF C11 H4 N5

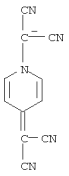


CM 2

CRN 13367-81-2
CMF C14 H12 N



L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 3

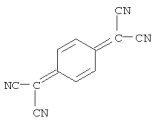
CRN 694-56-4
CMF C6 H8 N

CM 4

CRN 34504-23-9
CMF C12 H4 N4 . C6 H8 N

CM 5

CRN 34507-61-4
CMF C12 H4 N4
CCI RIS



CM 6

CRN 694-56-4
CMF C6 H8 N

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

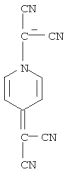
RN 93179-20-5 CAPLUS
CN Pyridinium, 1-ethyl-, salt with 2,2'-(2,5-cyclohexadiene-1,4-diylidene)bis[propanedinitrile] (1:1), compd. with 1-ethylpyridinium salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 93179-10-3
CMF C11 H4 N5 . C7 H10 N

CM 2

CRN 84662-81-7
CMF C11 H4 N5



CM 3

CRN 15302-96-2
CMF C7 H10 N

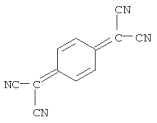
L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 4

CRN 52700-09-1
CMF C12 H4 N4 . C7 H10 N

CM 5

CRN 34507-61-4
CMF C12 H4 N4
CCI RIS



CM 6

CRN 15302-96-2
CMF C7 H10 N

RN 93179-21-6 CAPLUS
CN Quinolinium, 1-methyl-, salt with 2,2'-(2,5-cyclohexadiene-1,4-diylidene)bis[propanedinitrile], compd. with 1-methylquinolinium salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (9CI) (CA INDEX NAME)

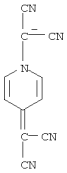
L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 1

CRN 93179-15-8
CMF C11 H4 N5 . C10 H10 N

CM 2

CRN 84662-81-7
CMF C11 H4 N5



CM 3

CRN 21979-19-1
CMF C10 H10 N

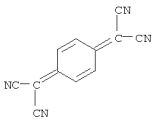
CM 4

CRN 34504-25-1
CMF C12 H4 N4 . C10 H10 N

CM 5

CRN 34507-61-4
CMF C12 H4 N4
CCI RIS

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 6

CRN 21979-19-1
CMF C10 H10 N

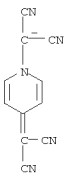
RN 93179-22-7 CAPLUS
CN Quinolinium, 1-ethyl-, salt with 2,2'-(2,5-cyclohexadiene-1,4-diylidene)bis[propanedinitrile], compd. with 1-ethylquinolinium salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (9CI) (CA INDEX NAME)

CM 1

CRN 93179-16-9
CMF C11 H12 N . C11 H4 N5

CM 2

CRN 84662-81-7
CMF C11 H4 N5



L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CM 3

CRN 48122-97-0
CMF C11 H12 N

CM 4

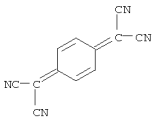
CRN 50973-56-3
CMF C12 H4 N4 . C11 H12 N

CM 5

CRN 48122-97-0
CMF C11 H12 N

CM 6

CRN 34507-61-4
CMF C12 H4 N4
CCI RIS



RN 93179-23-8 CAPLUS
CN Pyridinium, 1-methyl-, salt with [4-(dicyanomethylene)-1(4H)-

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
pyridinyl]propanedinitrile, compd. with iodine (9CI) (CA INDEX NAME)

CM 1

CRN 7553-56-2
CMF I2

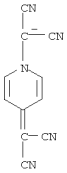
I—I

CM 2

CRN 93179-10-3
CMF C11 H4 N5 . C7 H10 N

CM 3

CRN 84662-81-7
CMF C11 H4 N5



CM 4

CRN 15302-96-2
CMF C7 H10 N

RN 93179-25-0 CAPLUS
CN Quinolinium, 1-methyl-, salt with [4-(dicyanomethylene)-1(4H)-
pyridinyl]propanedinitrile, compd. with iodine (9CI) (CA INDEX NAME)

CM 1

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
pyridinyl]propanedinitrile, compd. with iodine (9CI) (CA INDEX NAME)

CM 1

CRN 7553-56-2
CMF I2

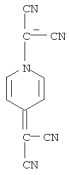
I—I

CM 2

CRN 93179-09-0
CMF C11 H4 N5 . C6 H8 N

CM 3

CRN 84662-81-7
CMF C11 H4 N5



CM 4

CRN 694-56-4
CMF C6 H8 N

RN 93179-24-9 CAPLUS
CN Pyridinium, 1-ethyl-, salt with [4-(dicyanomethylene)-1(4H)-

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CRN 7553-56-2
CMF I2

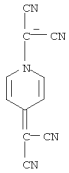
I—I

CM 2

CRN 93179-15-8
CMF C11 H4 N5 . C10 H10 N

CM 3

CRN 84662-81-7
CMF C11 H4 N5



CM 4

CRN 21979-19-1
CMF C10 H10 N

RN 93179-26-1 CAPLUS
CN Quinolinium, 1-ethyl-, salt with [4-(dicyanomethylene)-1(4H)-
pyridinyl]propanedinitrile, compd. with iodine (9CI) (CA INDEX NAME)

CM 1

CRN 7553-56-2
CMF I2

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

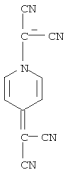
I— I

CM 2

CRN 93179-16-9
CMF C11 H12 N . C11 H4 N5

CM 3

CRN 84662-81-7
CMF C11 H4 N5

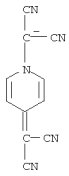


CM 4

CRN 48122-97-0
CMF C11 H12 N

IT 93179-28-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with pyridinium and quinolinium compds.)
RN 93179-28-3 CAPLUS
CN Propanedinitrile, [4-(dicyanomethylene)-1(4H)-pyridinyl]-, ion(1-), potassium (9CI) (CA INDEX NAME)

L10 ANSWER 17 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



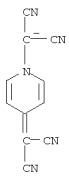
● K+

L10 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1983:118425 CAPLUS
DOCUMENT NUMBER: 98:118425
ORIGINAL REFERENCE NO.: 98:17865a,17868a
TITLE: Preparation and properties of AzaTCNQ- anion salts and
mixed AzaTCNQ-/TCNQ•-/TCNQ salts of some tetrakis(isocyanide)rhodium(I) cations, and x-ray crystal structure of the AzaTCNQ--tetrakis(2,6-dimethylphenyl isocyanide)rhodium(I)+ salt
AUTHOR(S): Matsubayashi, Genetsu; Tanaka, Hirohisa; Tanaka, Toshio; Nakatsu, Kazumi
CORPORATE SOURCE: Fac. Eng., Osaka Univ., Suita, 565, Japan
SOURCE: Inorganica Chimica Acta (1982), 63(2), 217-24
CODEN: ICHAA3; ISSN: 0020-1693
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The following ATCNQ- salts and mixed ACTNQ-/TCNQ•-/TCNQ salts (ATCNQ- = 4-dicyanomethylenepyridinium dicyanomethylide) of [Rh(RNC)4]+ were prepared: [Rh(RNC)4]+ATCNQ- (R = Ph, 2,6-Me2C6H3, and 2,4,6-Me3C6H2), [Rh(RNC)4]+(ATCNQ-)n(TCNQ•-)1-n (R = 2,6-Me2C6H3, n = 0.2; R = Ph and 2,4,6-Me3C6H2, n = 0.3), and [Rh(RNC)4]+(ATCNQ-)0.9(TCNQ•-)0.1(TCNQ)0.8 (R = 2,6-Me2C6H3 and 2,4,6-Me3C6H2). Of these salts, [Rh(2,6-Me2C6H3NC)4]+(ATCNQ-/TCNQ•-) and [Rh(2,6-Me2C6H3NC)4]+(ATCNQ-/TCNQ•-/TCNQ) exhibit elec. resistivities of .apprx.1 + 105 Ωcm as compacted samples at 25° and behave as typical semiconductors, while the resistivities of other salts are larger than 1 + 109 Ωcm. Electronic absorption spectra and magnetic susceptibilities of the salts are discussed in terms of stackings of TCNQ•-, TCNQ, and ATCNQ- in the solid state. The crystal structure of [Rh(2,6-Me2C6H3NC)4]+ATCNQ- was determined by single-crystal x-ray diffraction.
The triclinic crystal, space group P.hivin.1, has a 10.964(2), b 12.768(2), c 8.375(1) Å, α 102.03(2), β 88.84(2), γ 112.07(2)°, and Z = 1, where the orientation of the ATCNQ- is disordered with respect to the pyridinium ring. Least-squares refinement, based on 4094 independent reflections with |Fo| > 3σ(F), gave an R = 0.052.
IT 84662-83-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, crystal structure, elec. resistance and magnetic susceptibility of)
RN 84662-83-9 CAPLUS
CN Rhodium(1+), tetrakis(2-isocyano-1,3-dimethylbenzene)-, (SP-4-1)-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

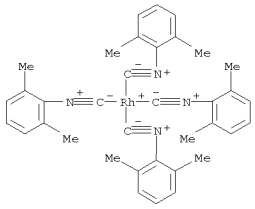
CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

CRN 61754-49-2
CMF C36 H36 N4 Rh
CCI CCS

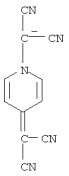


IT 84662-82-8DP, solid solution with tetrakis(phenylisocyanide)rhodium TCNQ 84662-82-8P 84662-83-9DP, solid solution with tetrakis(dimethylphenylisocyanide)rhodium TCNQ 84662-84-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, elec. resistance and magnetic susceptibility of)
RN 84662-82-8 CAPLUS
CN Rhodium(1+), tetrakis(isocyanobenzene)-, (SP-4-1)-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

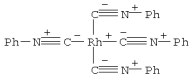
CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

CRN 56192-48-4
CMF C28 H20 N4 Rh
CCI CCS

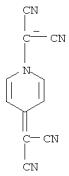


RN 84662-82-8 CAPLUS
CN Rhodium(1+), tetrakis(isocyanobenzene)-, (SP-4-1)-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

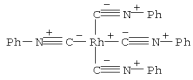
CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

CRN 56192-48-4
CMF C28 H20 N4 Rh
CCI CCS

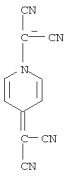


RN 84662-83-9 CAPLUS
CN Rhodium(1+), tetrakis(2-isocyano-1,3-dimethylbenzene)-, (SP-4-1)-, salt with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

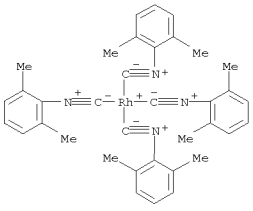
CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

CRN 61754-49-2
CMF C36 H36 N4 Rh
CCI CCS

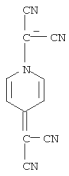


RN 84662-84-0 CAPLUS
CN Rhodium(1+), tetrakis(2-isocyano-1,3,5-trimethylbenzene)-, (SP-4-1)-, salt
with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

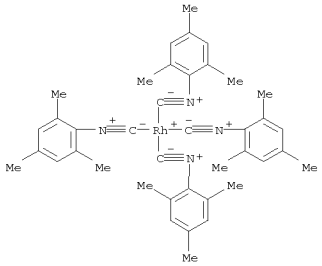
CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

CRN 70443-06-0
CMF C40 H44 N4 Rh
CCI CCS

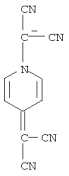


IT 84662-84-0DP, solid solution with tetrakis(trimethylphenylisocyanide) rhodium TCNQ
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, elec. resistance and magnetic susceptibility of,)
RN 84662-84-0 CAPLUS
CN Rhodium(1+), tetrakis(2-isocyano-1,3,5-trimethylbenzene)-, (SP-4-1)-, salt
with [4-(dicyanomethylene)-1(4H)-pyridinyl]propanedinitrile (1:1) (9CI) (CA INDEX NAME)

CM 1

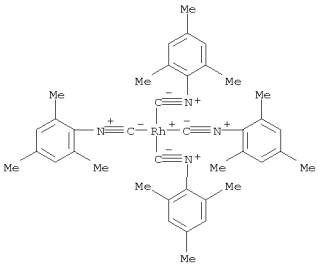
CRN 84662-81-7
CMF C11 H4 N5

L10 ANSWER 18 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

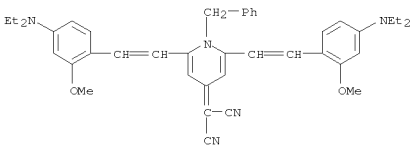
CRN 70443-06-0
CMF C40 H44 N4 Rh
CCI CCS



L10 ANSWER 19 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
N,N-diallyl-N-arylamine, and C3-12 heterocyclic contg. ≥1 N atom in the ring structure. Thus, poly(di-p-tolylaminostyrene) 0.255 was mixed with a soln. contg. I 0.045, CH2Cl2 20 g, combined with Isopar G 225 mL, centrifuged, to give a ppt. (contg. 15% of I), 0.26 g of which was milled 3 h with vinyltoluene-lauryl methacrylate-Li methacrylate-methacrylic acid
polymer 0.26, Isopar G 4.65, and imaged in an imaging app. (Carousel projector with W lamp, imaging electrode 12.5-50 cm, voltage -1.5 kV) to give an image with Dmax and Dmin 1.42 and 0.08, resp., vs. 0.54 and 0.15 for a binder-free control.

IT 65833-38-7
RL: USES (Uses)
(photoelectrophoretic imaging dispersion containing polymeric binder and)

RN 65833-38-7 CAPLUS
CN Propanedinitrile, [2,6-bis[2-[4-(diethylamino)-2-methoxyphenyl]ethenyl]-1-(phenylmethyl)-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)

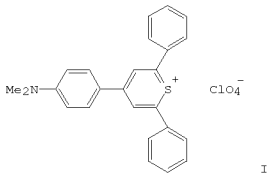


L10 ANSWER 19 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:433460 CAPLUS
DOCUMENT NUMBER: 95:33460
ORIGINAL REFERENCE NO.: 95:5629a,5632a
TITLE: Electrically photosensitive particles for electrophoretic migration imaging processes, dispersions of these particles and processes using such dispersions
INVENTOR(S): Merrill, Stewart Henry; Turnblom, Ernest Wayne; Stahly, Frederick August; Wright, Beth George; Wright, Hal Eldon
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Eur. Pat. Appl., 68 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 24169	A2	19810225	EP 1980-302706	19800807
EP 24169	A3	19811125		
R: CH, DE, FR, GB				
US 4322487	A	19820330	US 1979-64972	19790808
CA 1143204	A1	19830322	CA 1980-357297	19800730
JP 56030159	A	19810326	JP 1980-108369	19800808

PRIORITY APPLN. INFO.: US 1979-64972 A 19790808

GI



I

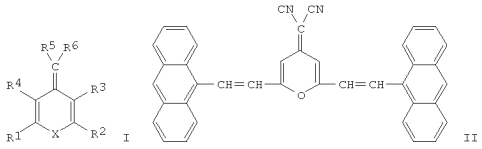
AB Elec. photosensitive dispersion for electrophoretic imaging consists of a colorant and a polymeric binder comprising units containing ≥1 structures of triarylamine, p-aminotetraarylmethane, 4,4'-bis(p-amino)triarylmethane, 1,1-bis(p-aminoaryl)isobutane, 1,1-bis(p-aminoaryl)cyclohexane, N-alkyl-N,N-diarylamine, N-alkenyl-N,N-diarylamine,

L10 ANSWER 20 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1979:430527 CAPLUS
DOCUMENT NUMBER: 91:30527
ORIGINAL REFERENCE NO.: 91:4883a,4886a
TITLE: Photoelectrophoretic particles for producing color images
INVENTOR(S): Vanallan, James Albert; Webster, Frank Glenn; Reynolds, George Arthur
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Ger. Offen., 74 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2831054	A1	19790118	DE 1978-2831054	19780714
DE 2831054	B2	19820107		
DE 2831054	C3	19820812		
US 4145215	A	19790320	US 1977-816128	19770715
US 4146707	A	19790327	US 1978-874078	19780201
CA 1110898	A1	19811020	CA 1978-305192	19780612
FR 2397659	A1	19790209	FR 1978-20765	19780712
FR 2397659	B1	19800404		
JP 54021722	A	19790219	JP 1978-85243	19780714
GB 2002528	A	19790221	GB 1978-30093	19780717
GB 2002528	B	19820127		

PRIORITY APPLN. INFO.: US 1977-816128 A 19770715

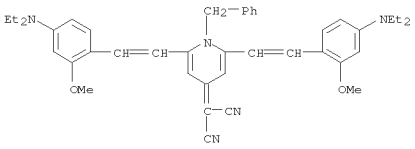
GI



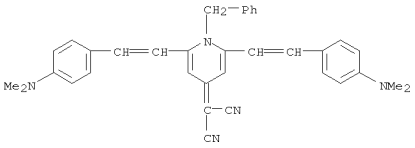
I II

AB Elec. photosensitive particles for a photoelectrophoretic imaging device have the structure I (X is O, S, Se, or NR, where R = halogen, OH, alkoxy, or aryloxy substituted alkyl, aryl, aralkyl, cycloalkyl, alkenyl, or alkynyl; R5, R6 = CN or taken together form an O-substituted cyclic ring, other heterocyclic ring, or electron acceptor group; R1, R2 = alkyl, aryl, CL1(=CL2CL3=)mA1, CL4=CL5(CL3=CL7)n A2, or R1 is the same as R4 or R2 is the same as R3 in the completion of an alkylene bridge, where m and n = 0, 1, or 2; L1, L2, L3, L4, L5, L6, and L7 = H, alkyl, or aryl, or L3 or L4 is the same as R3 or R4 for completion of a carbocyclic ring; A1 and A2 are basic heterocyclic groups; R3 is H or the same as R2, L1, or L4 in

L10 ANSWER 20 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
a 5- or 6-membered carbocyclic ring; R4 is H or the same as R1, L1, or L4 in a 5- or 6-membered carbocyclic ring). Thus, an excellent red-brown image was produced by a known electrophoretic imaging method with the use of a dispersion contg. II.
IT 65833-38-7 65833-47-8 65833-48-9
70503-51-4
RL: USES (Uses)
(electrophoretic color imaging composition containing elec. photosensitive
particles of)
RN 65833-38-7 CAPLUS
CN Propanedinitrile, [2,6-bis[2-[4-(diethylamino)-2-methoxyphenyl]ethenyl]-1-(phenylmethyl)-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)

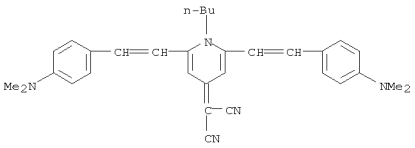


RN 65833-47-8 CAPLUS
CN Propanedinitrile, [2,6-bis[2-[4-(dimethylamino)phenyl]ethenyl]-1-(phenylmethyl)-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)

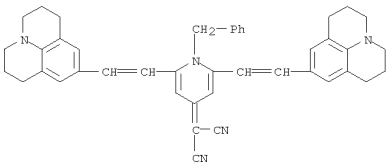


RN 65833-48-9 CAPLUS
CN Propanedinitrile, [1-butyl-2,6-bis[2-[4-(dimethylamino)phenyl]ethenyl]-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)

L10 ANSWER 20 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 70503-51-4 CAPLUS
CN Propanedinitrile, [1-(phenylmethyl)-2,6-bis[2-(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)ethenyl]-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)



L10 ANSWER 21 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN

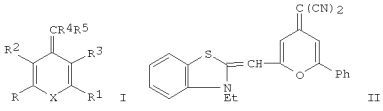
ACCESSION NUMBER:	1978:128987 CAPLUS
DOCUMENT NUMBER:	88:128987
ORIGINAL REFERENCE NO.:	88:20171a,20174a
TITLE:	Migration imaging process
AUTHOR(S):	Van Allan, James Albert; Webster, Frank Glenn; Reynolds, George Arthur
CORPORATE SOURCE:	UK
SOURCE:	Research Disclosure (1977), 162, 26-31 (No. 16247) CODEN: RSDSBB; ISSN: 0374-4353
DOCUMENT TYPE:	Journal; Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RD 162047		19771010	RD 1977-162047	19771010

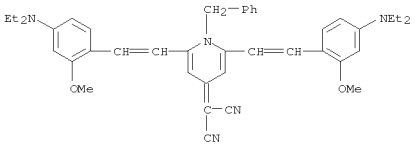
PRIORITY APPLN. INFO.: RD 1977-162047 19771010

GI

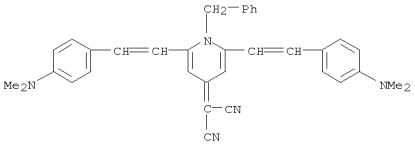


AB Forty electrophotosensitive pigments of the structure I (R, R1 are heterocyclic nuclei linked through a system of conjugated double bonds, R2, R3 are H or together with R and R1, resp., form a carbocyclic ring; R4, R5 are electron-withdrawing groups or together form an acidic heterocycle as in merocyanine dyes; and X is O, S, or NR6 where R6 is alkyl, aryl, aralkyl, or the like) are described for use in electrophoretic migration imaging. Thus, to 5g of an imaging dispersion containing Isopar G 2.2, Solvesso 1.3, Piccotex 100 1.4, and lauryl methacrylate-Li methacrylate-methacrylic acid-vinyltoluene polymer 0.1g was added II 0.45 g and the dispersion then milled with stainless steel balls for 3 h. Upon testing this dispersion in a migration imaging process, a neg. of an original was obtained on 1 electrode and a complementary image on the other electrode.
IT 65833-38-7 65833-47-8 65833-48-9
RL: USES (Uses)
(electrophotosensitive pigment, for migration imaging process)
RN 65833-38-7 CAPLUS
CN Propanedinitrile, [2,6-bis[2-[4-(diethylamino)-2-methoxyphenyl]ethenyl]-1-(phenylmethyl)-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)

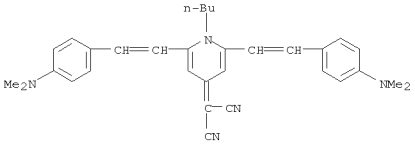
L10 ANSWER 21 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



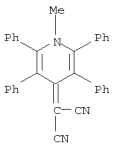
RN 65833-47-8 CAPLUS
CN Propanedinitrile, [2,6-bis[2-[4-(dimethylamino)phenyl]ethenyl]-1-(phenylmethyl)-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)



RN 65833-48-9 CAPLUS
CN Propanedinitrile, [1-butyl-2,6-bis[2-[4-(dimethylamino)phenyl]ethenyl]-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)

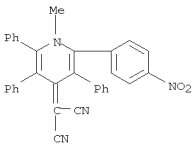


L10 ANSWER 22 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1975:170771 CAPLUS
DOCUMENT NUMBER: 82:170771
ORIGINAL REFERENCE NO.: 82:27289a,27292a
TITLE: Heterocycles by cycloaddition. I. Cycloaddition-extrusion-ring expansion reactions of five-membered mesoionic compounds with diphenylcyclopropenone and related compounds. Preparation of six-membered heterocycles
AUTHOR(S): Matsukubo, Hiroshi; Kato, Hiroshi
CORPORATE SOURCE: Dep. Chem., Shinshu Univ., Matsumoto, Japan
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1975), (7), 632-5
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB MeNBzCHPhCO2H with Ac2O cyclized to the mesoionic oxazolone I which with the cyclopropenylidene derivs. II [R = O, S, NSO2C6H4Me-p, C(CN)2, C(CN)CO2Et] gave 41-65% of the corresponding pyridine derivs. III. The thiazolone IV with II also gave III. The mesoionic dithiolone V with II [R = C(CN)CO2Et] gave the expected thiopyran derivative VI and the indenothiopyran VII.
IT 54133-10-7P 56197-87-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 54133-10-7 CAPLUS
CN Propanedinitrile, (1-methyl-2,3,5,6-tetraphenyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)

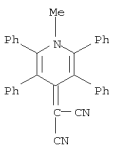


RN 56197-87-6 CAPLUS
CN Propanedinitrile, [1-methyl-2-(4-nitrophenyl)-3,5,6-triphenyl-4(1H)-pyridinylidene]- (9CI) (CA INDEX NAME)

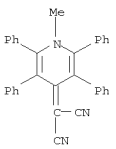
L10 ANSWER 22 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



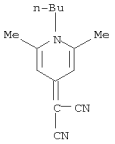
L10 ANSWER 23 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1975:156017 CAPLUS
DOCUMENT NUMBER: 82:156017
ORIGINAL REFERENCE NO.: 82:24889a,24892a
TITLE: Reactions of triafulvenes with azomethine ylides
AUTHOR(S): Eicher, Th.; Schaefer, V.
CORPORATE SOURCE: Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, Fed. Rep. Ger.
SOURCE: Tetrahedron (1974), 30(22), 4025-9
CODEN: TETRAB; ISSN: 0040-4020
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB The reaction of the azomethine ylides I (R = Me, Ph, R1 = Me, R2= Ph; R = R2 = Me, R1 = Ph), prepared by heating RCONR1CHR2CO2H with Ac2O, with cyclopropenones II (R3 = R4 = Ph, X = O, S; R3 = Me, Ph, R4 = Me, X = O) and of I (R = R2 =Ph, R1 = Me) with methylenecyclopropenes III (R5 = R6 = CN, COMe, COPh; R5 = CN, R6 = COPh, CO2Me) gave 4-pyridones IV and 1,4-dihydro-N-methyl-4-methylenepyridines V, resp., by (3 + 3) cycloaddn. The merocyanine systems V exhibited solvatochromic and thermochromic properties.
IT 54133-10-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 54133-10-7 CAPLUS
CN Propanedinitrile, (1-methyl-2,3,5,6-tetraphenyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)



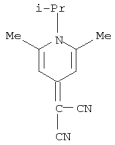
L10 ANSWER 24 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:504800 CAPLUS
DOCUMENT NUMBER: 81:104800
ORIGINAL REFERENCE NO.: 81:16563a,16566a
TITLE: Cycloaddition reactions of cyclic and acyclic 1,3-dipoles with diphenylcyclopropenone and related compounds. A new rearrangement
AUTHOR(S): Matsukubo, Hiroshi; Kato, Hiroshi
CORPORATE SOURCE: Dep. Chem., Shinshu Univ., Matsumoto, Japan
SOURCE: Journal of the Chemical Society, Chemical Communications (1974), (10), 412-13
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Cycloaddn. of diphenylcyclopropenes, e.g. I, to mesoionic compds., e.g. II, occurred across the C:C double bond to give 33-63% 1,4-dihydrotetraphenylpyridine and tetraphenylthiopyran derivs. e.g. III. Cycloaddn. of PhCNO with I occurred across the C:O double bond to give, by
rearrangement, 40% triphenyl-1,3-oxazin-6-one.
IT 54133-10-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 54133-10-7 CAPLUS
CN Propanedinitrile, (1-methyl-2,3,5,6-tetraphenyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)



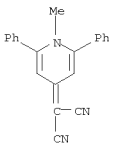
L10 ANSWER 25 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:133209 CAPLUS
DOCUMENT NUMBER: 80:133209
ORIGINAL REFERENCE NO.: 80:21477a,21480a
TITLE: Synthesis and properties of heterofulvenes. Derivatives of 2,6-dimethyl-γ-pyrone, -γ-thiapyrone, and N-butyl-2,6-dimethyl-γ-pyridone
AUTHOR(S): Belsky, I.; Dodiuk, H.; Shvo, Y.
CORPORATE SOURCE: Dep. Chem., Tel-Aviv Univ., Tel-Aviv, Israel
SOURCE: Journal of Organic Chemistry (1974), 39(7), 989-95
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
AB O-, S-, and N-containing heterofulvenes, derivs. of 2,6-dimethyl-γ-pyrone (I), -γ-thiapyrone (II), and N-butyl-2,6-dimethyl-γ-pyridone were prepared The O and S heterocycles were prepared by condensation of I and II, resp., with active methylene compds. in Ac2O. The N heterocycles were obtained from the O heterocycles by reaction with BuNH2. Side reactions were observed when BuNH2 reacted with methyl 2,6-dimethyl-4H-pyran-4-ylidenenitroacetate and 2,6-dimethyl-4H-pyran-4-ylidenenitroacetone. A new convenient route to heterofulvenes which bear a single substituent at the exocyclic double bond was developed. Thus, heterofulvenes substituted by an acetyl group at the exocyclic double bond were found to undergo acetyl cleavage, under very mild acidic conditions, resulting in the formation of monosubstituted heterofulvenes. Deuterium exchange reactions in the systems under consideration were studied. The NMR, uv, and ir data of the disubstituted and monosubstituted heterofulvenes are discussed in terms of the heteroatom and the substituents at the exocyclic double bond.
IT 49810-95-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 49810-95-9 CAPLUS
CN Propanedinitrile, (1-butyl-2,6-dimethyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)



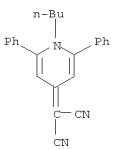
L10 ANSWER 26 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1971:463550 CAPLUS
DOCUMENT NUMBER: 75:63550
ORIGINAL REFERENCE NO.: 75:10067a,10070a
TITLE: Reactions of 4-dicyanomethylenepyrans with hindered primary amines
AUTHOR(S): VanAllan, J. A.; Reynolds, G. A.
CORPORATE SOURCE: Res. Lab., Eastman Kodak Co., Rochester, NY, USA
SOURCE: Journal of Heterocyclic Chemistry (1971), 8(3), 367-71
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Reaction of 2,6-dimethyl- and 2,6-diphenyl-4-dicyanomethylene-4H-pyran with hindered primary amines such as isopropylamine and cyclohexylamine gave 1-alkyl-2-amino-3-cyano-6-methyl (or phenyl)-4-acetonylidene (or phenacylidene)-1,4-dihydropyridine derivs. 6-Methyl-4-acetonylidene examples underwent a facile thermal rearrangement to give 1-alkyl-2,6-dimethyl-4-dicyanomethylene-1,4-dihydropyridines. Several reactions of the acylidene derivs. are described.
IT 32883-35-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 32883-35-5 CAPLUS
CN Δ4(1H),α-Pyridinemalononitrile, 1-isopropyl-2,6-dimethyl- (8CI) (CA INDEX NAME)



L10 ANSWER 27 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1970:435253 CAPLUS
DOCUMENT NUMBER: 73:35253
ORIGINAL REFERENCE NO.: 73:5841a,5844a
TITLE: Reactions of some 4-methylene-4H-pyran derivatives with primary and secondary amines
AUTHOR(S): Van Allan, James A.; Reynolds, George Arthur; Petropoulos, C. C.; Maier, D. P.
CORPORATE SOURCE: Res. Lab., Eastman Kodak Co., Rochester, NY, USA
SOURCE: Journal of Heterocyclic Chemistry (1970), 7(3), 495-507
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 73:35253
AB 4-Dicyanomethylene-4H-pyrans react with secondary amines to give 2-aminopyridine and 2-pyridone derivs., which, in turn, were used to prepare copyrine derivatives. These pyrans and pyrimary amines gave copyrine and iminopyridone derivatives in addition to dicyanomethylene-1,4-dihydropyridines. Reaction of cyanocarbamoylmethylene-4H-pyrans with secondary amines gave 2-pyrones, and with primary amines, gave copyrines and 1,4-dihydropyridine derivs.
IT 27337-89-9P 27337-90-2P 27368-13-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 27337-89-9 CAPLUS
CN Δ4(1H),α-Pyridinemalononitrile, 1-methyl-2,6-diphenyl- (8CI) (CA INDEX NAME)

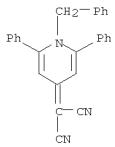


RN 27337-90-2 CAPLUS
CN Δ4(1H),α-Pyridinemalononitrile, 1-butyl-2,6-diphenyl- (8CI) (CA INDEX NAME)

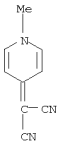


L10 ANSWER 27 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

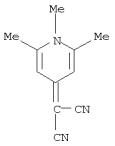
RN 27368-13-4 CAPLUS
CN Δ4(1H),α-Pyridinemalononitrile, 1-benzyl-2,6-diphenyl- (8CI) (CA INDEX NAME)



L10 ANSWER 28 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1967:508532 CAPLUS
DOCUMENT NUMBER: 67:108532
ORIGINAL REFERENCE NO.: 67:20455a,20458a
TITLE: Stable pyridine anhydro-bases
AUTHOR(S): Boyd, Gerhard V.; Ezekiel, A. D.
CORPORATE SOURCE: Chelsea Coll. Sci. Technol., London, UK
SOURCE: Journal of the Chemical Society [Section] C: Organic (1967), (19), 1866-8
CODEN: JSOOAX; ISSN: 0022-4952
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Twelve 2- and 4-methylenedihydropyridines containing strongly electron-withdrawing groups on the methylene C atoms have been prepared One anomalous reaction was encountered. The anhydro-bases are protonated in acid solution (in 2 cases also in water) on the exocyclic C atom forming pyridinium ions.
IT 16344-72-2P 16344-75-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 16344-72-2 CAPLUS
CN Propanedinitrile, 2-(1-methyl-4(1H)-pyridinylidene)- (CA INDEX NAME)



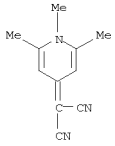
RN 16344-75-5 CAPLUS
CN Propanedinitrile, (1,2,6-trimethyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)



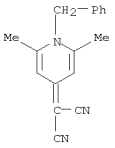
L10 ANSWER 28 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L10 ANSWER 29 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1963:66941 CAPLUS
DOCUMENT NUMBER: 58:66941
ORIGINAL REFERENCE NO.: 58:11496h,11497a-d
TITLE: Alkyl substituted pyrylo- and pyridinocyanines. I. 2,6-Dimethylpyrylo- and 2,6-dimethylpyridinocyanine from 2,6-dimethyl-γ-pyrone
AUTHOR(S): Kelemen, Jozsef; Wizinger, Robert
CORPORATE SOURCE: Univ. Basel, Switz.
SOURCE: Helvetica Chimica Acta (1962), 45, 1908-17
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB 2,6-Dimethyl-γ-pyrone was condensed with active methylene and methyl compds. by the procedure of Woods (CA 52, 12853i) to give the cyanine dyes I or II, which were condensed with MeNH2 in EtOH to give the pyridine derivs. III or IV. Thus, to a hot saturated solution of I [R = (NC)2C] (Woods, loc. cit.) in EtOH was added an excess of MeNH2 in EtOH, the mixture refluxed 30 min., cooled, and the precipitate washed with ice-cold EtOH to give III [R = (NC)2C], m. 225-8°, colorless in EtOH, λmaximum 356 mμ. Similarly were prepared (compound, R, m.p., color in EtOH, λmaximum in mμ; m.p., color in EtOH, and λmaximum in mμ of pyridine analogs given): I, p-O2NC6H4C(CN), 205-6°, yellow, 398, 224-6°, red, 487; I, 1,3-indandione-2-ylidene, 258-60° pale yellow, 404,303-4°, pale yellow, 387; I, 3-methyl-1-phenyl-5-pyrazolon-4-ylidene, 212-13°, orange, 410, 280-3°, yellow, 384; I, 3-(1,3-indandion-2-ylidene)-1-indanone-2-ylidene, 255-60° (decomposition), violet, 412 and 568, 313-14°, blue-violet, 558; II, 3-methyl-2-benzoxazolinylium, above 260° (decomposition), yellow, 414 and 430, above 300°, pale yellow, 412; II, 3-methyl-2-henzothiazolinylium, 296° (decomposition) (BF4- salt decompose 274°), yellow, 436 and 460 (BF4- salt 436 and 460), 328-9°, yellow, 440; II, 1-methyl-2(1H)-quinolylium, 220-4° (decomposition), yellow, 482, 258-9°, orange, 479 and 503; II, 1-methyl-4(1H)-quinolylium, 213-15° (decomposition), orange, 508, 237°, violet, 528; II, 2,6-diphenyl-4-pyrylium 223-4°, blue-red, 512, 243-4°, yellow, 454; and II, 4,6-diphenyl-2-pyrylium, 212-13° (HO2CCH2SO3H salt m. 198-200°), red-violet, 540 and 566 (HO2CCH2SO3H salt 540 and 566), 245°, carmine red, 495. Also prepared was the yellow N-phenyl analog of III (R = 3-methyl-2-benzothiazolylium) m. >250° (decomposition), λmaximum 452 mμ. 1,3,3-Trimethyl-2-(N-hydroxyformimidoyl)-2-indolinylium perchlorate (3 g.), 2.8 g. 2,6-diisopropyl-4-methyl-4-pyrylium perchlorate, and 0.8 g. fused powdered NaOAc in 20 ml. HOAc was boiled 1 min., the mixture cooled, and poured into Et2O to give (1,3,3-trimethyl-2-indolenine)-(2,6-diisopropylpyrylo)monomethinecyanine perchlorate, m. 178.
IT 16344-75-5, Δ4(1H),α-Pyridinemalononitrile, 1,2,6-trimethyl-
(spectrum of)
RN 16344-75-5 CAPLUS
CN Propanedinitrile, (1,2,6-trimethyl-4(1H)-pyridinylidene)- (9CI) (CA INDEX NAME)

L10 ANSWER 29 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

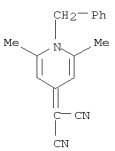


L10 ANSWER 30 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1961:144161 CAPLUS
DOCUMENT NUMBER: 55:144161
ORIGINAL REFERENCE NO.: 55:27301b-d
TITLE: Non-benzenoid aromatic heterocycles. III. Conversion of 4-pyrone derivatives into 4-pyridone derivatives
AUTHOR(S): Kato, Hiroshi; Ogawa, Takatoshi; Ohta, Masaki
CORPORATE SOURCE: Tokyo Inst. Technol
SOURCE: Bulletin of the Chemical Society of Japan (1960), 33, 1468-9
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB 4-Pyrones reacted with amines to give 4-pyridones. 4-(Dicyanomethylene)-2,6-dimethyl-4H-pyran (I) (3.5 g.) and 4 g. PhNH2 refluxed 1 hr. and the mixture washed with dilute HCl gave 20% N-phenyl-4-(dicyanomethylene)-2,6-dimethyl-1,4-dihydropyridine, m. 314-15° (HOAc). Similarly, I with BzNH2 at 150° gave 34% N-benzyl-4-(dicyanomethylene)-2,6-dimethyl-1,4-dihydropyridine, m. 242-5° (EtOH), and with NH2NH2.H2O at 100° gave 40% N-amino-4-(dicyanomethylene)-2,6-dimethyl-1,4-dihydropyridine, m. 291-2° (decomposition) (HOAc). 4-(Ethoxycarbonylcyanomethylene)-2,6-dimethyl-4H-pyran with BzNH2 gave N-benzyl-4-(ethoxycarbonylcyanomethylene)-2,6-dimethyl-1,4-dihydropyridine, m. 183-4° (EtOH), with NH2NH2.H2O gave N-amino-4-(ethoxycarbonylcyanomethylene)-2,6-dimethyl-1,4-dihydropyridine, m. 217-18° (EtOH), but did not react with PhNH2 or HCONH2. N-Amino-4-(dicyanomethylene)-2,6-dimethyl-1,4-dihydropyridine (0.6 g.) and 0.4 g. BzH refluxed 1 hr. gave 0.6 g. (crude) N-benzalamino-4-(dicyanomethylene)-2,6-dimethyl-1,4-dihydropyridine, m. 294-5° (AcOH). I (5 g.) in 5 g. HCONH2 kept 1 hr. at 150° gave 1.7 g. 4-(dicyanomethylene)-2,6-dimethyl-1,4-dihydropyridine, m. 330-1° (HCO2H).
IT 107518-55-8P, Δ4(1H),α-Pyridinemalononitrile, 1-benzyl-2,6-dimethyl-
RL: PREP (Preparation)
(preparation of)
RN 107518-55-8 CAPLUS
CN Δ4(1H),α-Pyridinemalononitrile, 1-benzyl-2,6-dimethyl- (6CI)
(CA INDEX NAME)



L10 ANSWER 30 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

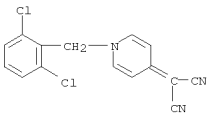
L10 ANSWER 31 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1961:81717 CAPLUS
DOCUMENT NUMBER: 55:81717
ORIGINAL REFERENCE NO.: 55:15482c-e
TITLE: Conversion of 4-pyrone derivatives into 4-pyridone derivatives
AUTHOR(S): Kato, Hiroshi; Ogawa, Takatoshi; Ohta, Masaki
CORPORATE SOURCE: Tokyo Inst. Technol., Japan
SOURCE: Chemistry & Industry (London, United Kingdom) (1960) 1300
CODEN: CHINAG; ISSN: 0009-3068
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB O.CMe:CH.C[:C(CN)R].CH:CMe2 (I) (R = CN) (Ia) with PhNH2 gave 20% R'N.CMe:CH.C[:C-(CN)R].CH:CMe (II) (R = CN, R' = Ph), m. 314-15°. Similarly prepared were II (R = CN, R' = PhCH2), m. 242-5°, with PhCH2NH2 (III), and II (R = CN, R' = NH2) (IV), m. 291-2°, with N2H4.H2O (V). The structure of IV was established by conversion to its benzal derivative, m. 254-5°. Heating Ia in HCONH2 gave II (R = CN, R' = H) or 34% 2,6-dimethyl-4-dicyanomethylpyridine, m. 294-5°. I (R = CO2Et) with III gave 80% II (R = CO2Et, R' = PhCH2), m. 183-4°, and with V gave 71% II (R = CO2Et, R' = NH2), m. 217-18°.
IT 107518-55-8P, Δ4(1H),α-Pyridinemalononitrile, 1-benzyl-2,6-dimethyl-
RL: PREP (Preparation)
(preparation of)
RN 107518-55-8 CAPLUS
CN Δ4(1H),α-Pyridinemalononitrile, 1-benzyl-2,6-dimethyl- (6CI)
(CA INDEX NAME)



L10 ANSWER 32 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:43354 CAPLUS
DOCUMENT NUMBER: 51:43354
ORIGINAL REFERENCE NO.: 51:8096e-i,8097a-i,8098a-f
TITLE: Pseudo bases. I. Additions of methyl and methylene ketones to pyridinium salts
AUTHOR(S): Krohnke, Fritz; Ellegast, Konrad; Bertram, Ewald
CORPORATE SOURCE: Forschungsinst. Dr. A. Wander, A.-G., Sackingen/Baden, Germany
SOURCE: Justus Liebigs Annalen der Chemie (1956), 600, 176-98
CODEN: JLACBF; ISSN: 0075-4617
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB Pyridinium, quinolinium, and isoquinolinium bases form addition compds. with simple Me ketones and with certain methylene ketones. The adducts are easily retrograded by acids, and can be dehydrogenated to form bases that yield stable salts. The adducts are considered to be "salts" in which the organic cation and anion are stabilized with regard to resonance, and which are related to bases (termed mesomeric cations) which are considered intermediate between ammonium arid carbinol bases. The possibility of existence. of pseudo bases (i.e. carbinol bases) increases with decreasing aromaticity of the heterocycle. With hyperaromatic N-heterocycles like pyridine, such bases could not be isolated. In the case of quinoline and isoquinoline derivs., in certain instances such bases could be prepared, but the formation of mesomeric cations was favored. In the acridine series, and with heterocycles containing O, carbinol bases are favored over ammonium or mesomeric cations; this also occurs in the Ph3CH series. Hydrogenation of heterecycles greatly increases the stability of the carbinol bases, which are easily isolated. 2,6-Cl2C2H2Me (322 g.) in 400 cc. CCl4, stirred and irradiated was treated dropwise with 100.2 cc. Br in 50 cc. CCl4 giving 422 g. 2,6-Cl4C4H4CH4Br (I), m. 55°; details of purification are given. I is a powerful lacrimator. I with a slight excess of pyridine (cf. C.A. 47, 1704f), heated in Me2CO gave, in excellent yield, N-(2,6dichlorobenzyl)pyridinium bromide (II) m. 216-17°; this in MeOH with p-ONC6H4NMe6 (IIa) gave 58% 2,6-Cl6C6H6CH:N→O) C6H6NMe6-4 (III), yellow prismatic spikes, m. 152-3°. When 10% pyridine or α-picoline was added to the MeOH, 75% and 81% III, resp., were obtained. Formed similarly from I and appropriately substituted pyridines were the following derivs. of II: 93% 3-Me, m. 183-4° (from 1:1 EtOH-Et2O); 89% 3-HOCH2.H2O, m. 111-13°; 97% 3-H2NCO (IIIa), m. 246-8°; 95% 3-Et2-NCO, m. 197°; 90% 3-NC, m. 187-8°; and 96% 3-AcNH, m. 231°. II (1.92 g.) in 15 cc. Me2CO and 3 cc. H2O at 20° with 5 cc. 2N NaOH gave 1.69 g. Me2CO adduct, C2H2ONCl2 (IV), colorless rhombs, m. 94-5° (when cooled to 0°; not recrystallizable), forming a brown resin on standing. Similarly formed were the following adducts of II, analogs of IV; 58% BzMe (IVa), pale yellow prisms, m. 80-1°; 70% cyclohexanone, yellowish leaflets, m. 83-4°; 66% deoxybenzoin, yellow, m. 87-8°; and 79% monohydrate of the 3-H2NCO derivative of IV, m. 138-9° (decomposition). In the following dehydro compds. R: =

L10 ANSWER 32 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
N-[2,6-dichlorobenzyl]-1,4-dihydro-4-pyridylidene. To 6.38 g. II in 25 cc. MeOH, 5 cc. BzMe, and 1.8 g. IIa at 20° under N was added 20 cc. 2N NaOH, giving, after 4 hrs. 5.4 g. R:CHBz (IVb), dark yellow rhombs, m. 166-7° (HClO4 salt, leaflets, m. 216-17°; HBr salt, thin rhombs, m. 187-88°). Similarly formed were the following compds. (reaction time in hrs., % yield, cryst. color and form, and m.p. given): R: CHAc (IVc), 3, 97, yellow needles changing to octahedra, 203-4° (HClO4 salt colorless, m. 192-3°); R:CHCOEt, 1.5, 19, yellow prisms, 219-20°; R:CHCOC6H4Me-4, 7, 70, yellow needles, 213-14°; R:CHCOC6H4OMe-4, 21, 72.6, yellow needles, 199-200°; R:CHCOC6H4Br-4, 7, 59.8, yellow prisms, 218-19°; R:C. CH2.CH2.CH2.CO, 4, 60, yellow rectangles with violet luster, 229-30°; R: C.CO.CH2.CH2.CH2.CH2, 2, 98.5, yellow prisms, 209-10°; R: C. CO. CH2.CHMe.CH2.CH2, 2.5, 90, orange polyhedrons, 207-8° (resinifying on storage); R:C.CO.CH2.CH2.CHMe.CH2, 2, 77.8, yellow triboelectric needles, 186°; R:C.CH2.CH2.CH2.CH2.CH2.CO, 20, 46, yellow prisms, 167-8°; R: CH-NO2, 2, 14.8, yellowish brown leaflets with blue luster, 233-5° (sintering at 230°). The following were prepd. using aeration (instead of IIa) and 2N MeONa in place of aq. NaOH: R:C(CN)2, 24, 30, colorless needles, 234-5°; cyclopentadienylidene analog, 40, 51°, red prisms with blue luster, 199-20° (from HCONMe2); 1-indenylidene analog (V), 30, 23, red microprisms with steely luster, 234-5° (from C6H6). The 9-fluorenylidene analog of V, C25H17NCl2, dark red prisms with blue luster, m. 232-3°, when formed with IIa, 55.7% yield in 90 hrs., with air, 10% in 96 hrs. Using air as oxidant, 0.64 g. II, 0.3 g. 1,3-indandione in 10 cc. MeOH contg. 0.4 cc. 10N NaOH gave, after 24 hrs., 0.32 g. N-[2,6-dichlorobenzyl]-4-[1,3-dioxo-2-hydrindylidene]-1,4-dihydropyridine, C12H13O2NCl2, yellow, m. 334-5° (from AcOH). Similarly, II and 1-phenyl-3-methyl-5-pyrazolone gave 70% N-[2,6-dichlorobenzyl]-4-[1-phenyl-3-methyl-5-pyrazolon-4-ylidene]-1,4-dihydropyridine, yellow, m. 223-4°. The following compds., R'N.CH:CH2C(:CHR'').CR''':-CH, formed by dehydrogenation (with IIa) of the appropriate ketone adducts (R' = 2,6-Cl2C6H3CH2; R''',R'', reaction time, % yield, cryst. properties, and m.ps. given): Me, Ac, 3, 89, yellow rhombs, 193° (HClO4 salt, m. 190-1°; HBr salt, hexagons, m. 216-18°); CH2OH, Ac, 1.5, 95.6, yellow hexagons, 205-6°; CH2OH, Bz, 17, 65, yellow rhombs, 207° (decompn.) (HBr salt, yellow, m. 220-1°, yellowish green ultraviolet fluorescence); CONH2 Ac, 1.5, 97.6, yellow, 220-1° (HBr salt, decomp. 289°); CONH2, Bz, 3, 89, -, -(HCl salt, yellow rhombic leaflets, 271-2°); CONH2, p-MeOC6H4CO, 72, 85, yellow, 278-9° (HCl salt, orange prisms, 271-2°, blue ultraviolet fluorescence in H2O); CONEt2, Bz, 7.97, yellow, 201°; CONEt2 Ac, 5.5, 86.5, yellow hexagons, 170-1° (when crude, m.p. lower on recrystn.); CONH2, (:CHR'' = 2-cyclohexanonylidene, 7, 71.4, yellow rectangles, m. 201-2° (decompn.). The 3,4-Cl2 isomer of II (0.96 g.) in 10 cc. Me2CO and 10 cc. H2O at 20° was shaken with 0.6 cc. 10N NaOH, 20 cc. Me2CO added to dissolve the resin, and then 0.63 g. KMnO4 in 10 cc. Me2CO. The warmed mixt. was filtered, treated with C, refiltered, H2O added to incipient cloudiness and cooled to 0° giving 0.32 g. N-[3,4-dichlorobenzyl]-4-acetonylidene-1,4-dihydropyridine (VI), yellow, m. 146-7° (from 1:1 C6H6-ligroine). Similarly formed were the 2,4-dichloro isomer of VI, yellow, m. 144-5° and the 4-monochloro analog of VI, yellow, m. 133-4° (from Et2O). VI and its isomer and analog resinify on standing. Oxidation of IVa in pyridine, with KMnO4 gave IVb. Formed similarly was the 3,4-dichloro isomer of IVb, yellow, m. 166° (cf. Baker and McEvoy, C.A. 50, 3454g). In place of IIa, K nitrosodisulfonate converted IV into 77% IVc. IV (0.62 g.) in dry C6H6 with 0.22 g. benzoquinone in 20 min. formed 0.75 g. adduct IVc.1,4-C6H4(OH)2, orange prisms, m. 176-8°, also formed from IVc and 1,4-C6H4(OH)2, readily reconverted into IVc by treatment with HClO4 followed by treatment with 2N NaOH. In the following cases adducts of N-phenethylpyridinium bromide (VII) were not isolated but dehydrogenated directly. E.g., 2.64 g. VII with 0.8 g. IIa and 3 cc. BzMe in 15 cc. MeOH under N, with 2 cc. 10N NaOH gave 1,6 g. N-phenethyl-4-phenylidene-1,4-dihydropyridine, yellow hexagons, m. 198-9° (from 50% MeOH, the mother liquor from which gave 0.05 g. azoxydimethylaniline, orange, m. 241-2°). Similarly prepd. from Me2CO was the 4-acetonylidene analog, yellow rectangles, m. 187-8°. Formed from the appropriate pyridinium salts, sometimes under slightly modified conditions were the following 4-acetonylidene-1,4-dihydropyridines: 45% N-PhCH(OH)CH2, yellow rhombs, decomp. about 227-8°; 72% N-[4-ClC6H4CH2CH2], yellow leaflets, m. 193-4°; 34.3% N-[4-ClC6H4CH(OH)CH2], yellow rhombs, m. 230-1° (decompn.); 42% N-[4-O2NC6H4CH(OH)CH2], slender yellow leaflets, decomp. 220°; N-[β-2-chlorostyryl], reddish brown leaflets, m. 182-3° (from C6H6). Similarly formed were the following 4-phenacylidene-1,4-dihydropyridines: N-PhCH(OH)CH2, yellow leaflets, decomp. 227-8°; N-[β-4-chlorostyryl], nacreous, orange leaflets, m. 230° (decompn.); N-(β-styryl), orange leaflets, m. 208-9° (sintering 188°); N-[β-2-chlorostyryl), reddish orange hexagons, m. 212°. The following 1,4-dihydropyridines, were also formed using air and NaOH in MeOH: 90% N-(β-styryl)-4-(1-phenyl-3-methyl-5-pyrazolon-4-ylidene), red slender leaflets, m. 239-40° and 43% N-(β2-chlorostyryl)-4-(2-cyclohexanonylidene), yellowish brown leaflets, m. 192-3°. Nicotinamide MeBr salt (2.17 g.) (VIII), 3 cc. BzMe, 0.8 g. IIa, and 60 cc. MeOH under N with 2 cc. 10N NaOH gave 1 g. N-methyl-4-phenacylidene-1,4-dihydronicotinamide (IX), yellow leaflets, m. 278-9° (decompn.), which with HBr at 100° formed 2-methyl-5,8-dihydro-5-phenyl-8-oxo-2,7-naphthyridinium bromide, yellow prisms, decomp. 299-300°. VIII with 4-MeOC6H4Ac gave 35.2% 4-MeO deriv. of IX, brownish yellow, nacreous leaflets, decomp. 277-8°; HBr salt-H2O, yellow needles, m. 278-9° (decompn.). N-(Diphenylmethyl)-4-(1-phenyl-3-methyl-5-pyrazolon-4-ylidene)-1,4-dihydropyridine, yellow, prisms, m. 238-9°. IVc (0.882 g.) in 50 cc. EtOH with 0.2 g. MgO was shaken at 20° with 50 mg. Pt black and hydrogenated. After filtration, and washing the residue with EtOH, the evapd. filtrates gave an oil which with 5 cc. N HClO4 gave 1.15 g. N-(2,6-dichlorobenzyl)-4-acetonylpiperidine-HClO4, colorless, m. 167-8° (from Me2CO). 39 references.

L10 ANSWER 32 OF 32 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
IT 100964-61-2P, Malononitrile, [1-(2,6-dichlorobenzyl)-4(1H)-pyridylidene]-
RL: PREP (Preparation)
(preparation of)
RN 100964-61-2 CAPLUS
CN Malononitrile, [1-(2,6-dichlorobenzyl)-4(1H)-pyridylidene]- (6CI) (CA INDEX NAME)



=>